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S. O. Indiana Officer Says Doheny Deal Won't Alter Present Policies

By Roger B. Stafford
N. P. N. STAFF WRITER

CLEVELAND, April 6

THE Standard Oil Co. of Indiana contemplates no immediate change of policy in operating its old properties or those coming under its control by reason of the purchase by a syndicate of a majority of the voting stock of the Pan-American Petroleum & Transport Co. from the family of E. L. Doheny.

This is the substance of a statement by an executive of the Indiana company.

The newly acquired properties are in Mexico, South America and in the eastern half of the United States and represent all divisions of the industry—production, transportation, refining and marketing.

Of greatest interest to the oil industry was the statement by the executive that no change was contemplated by the company in its relations to the Mid-Continent markets. This statement may be interpreted to mean that the company will operate its middle western refineries on Mid-Continent crude as it has been doing and that it will not become an aggressive factor in markets outside of the region commonly referred to as Standard of Indiana territory.

This statement gives assurance to Mid-Continent refiners that their markets will not be disturbed as they would be if the Indiana company should set out to extend rapidly its distributing plant through the territory now touched by the various subsidiaries of the Pan-American in the southern and Atlantic seaboard states.

Stations to Go on as Before

The fuel oil distributing stations of the Mexican Petroleum Co. up and down the Atlantic and Gulf coast which could quickly be put in shape to handle a considerable gasoline gallonage will continue for the present to handle fuel oil and asphalt almost exclusively.

The plan is to operate the Destrehan, La., refinery, of the Mexican Petroleum Co., about as it has in the past two years. Gasoline made there from Mexican and California crude is distributed through the New Orleans territory, where the company has its own service stations, through companies the Mexican Petroleum interests acquired in the past two or three years through the south, and some is shipped by rail and water up the Mississippi river valley well into Standard of Indiana marketing territory.

The principal motive back of the purchase of the control of the Doheny eastern properties by the Standard of Indiana and its associates, was to assure the Standard of a future crude oil supply.

Fred H. Wickett
President, Dixie Oil Company

This motive was set forth in the March 18 issue of National Petroleum News and is borne out by the following statement issued by the Standard April 1, the day the purchase was formally announced:

"The Standard Oil Co. of Indiana announces the completion of the purchase, by a syndicate of which it is a member, of the majority of the voting stock of the Pan-American Petroleum & Transport Co. The details of the transaction and of the resulting changes in the Pan-American organization are covered by a statement of the purchasing syndicate.

Crude Supply Protected

"By this investment, the Standard Oil Co. of Indiana has advanced its program for the protection of the supplies of crude oil which is essential to enable it to meet the ever increasing demand of its customers for petroleum products. The Pan-American Petroleum & Transport Co. does not engage in business in the territory in which the Standard Oil Co. of Indiana operates, but its great crude oil production can, in case of need, become a source of supplies for the principal refineries of the Standard Oil Co."

As has been pointed out the Standard of Indiana with its huge marketing facilities, has been entirely dependent on crude from the Mid-Continent field and the Wyoming fields. Output in the latter district is not holding up at what it was when the company bought the Midwest Refining Co. Competition for Mid-Continent crude is likely to increase rather than lessen. The company felt its position insecure until it was in possession of enough crude resources in its own name to insure a supply for its marketing territory for years to come.

Details of the acquisition of the control of the Pan-American Petroleum & Transport Co. by the purchase of a majority of the voting common stock by a syndicate for the account of a newly formed corporation, the Pan-American

Eastern Petroleum Corp., are set forth in the following statement issued by Blair & Co., New York bankers that headed the syndicate.

Blair & Co. Statement

"Blair & Co., Inc., announce on behalf of a syndicate which they have formed, composed of Blair & Co., interests identified with the Chase banking group (New York), together with British interests, represented by Lord Inverforth, (British Mexican Petroleum Co.) and the Standard Oil Co. of Indiana, they have purchased 501,000 shares out of 1,001,556 outstanding of the voting stock of the Pan-American Petroleum & Transport Co.

"This stock constituted the holdings of E. L. Doheny and the members of his family, held in the name of the Petroleum Securities Co. This transaction thus involves the transfer of the control of the Pan-American Petroleum & Transport Co. from the Petroleum Securities Co. to the new interests. These interests have organized the Pan-American Eastern Petroleum Corp., incorporated in Delaware, March 27, to hold the shares of the Pan-American Petroleum & Transport Co. thus acquired.

"The authorized capitalization of the Pan-American Eastern Petroleum Corp. is 250,000 shares of preferred stock of $100. par value and 1,000,000 shares of common stock of no par value.

"The Pan-American Petroleum & Transport Co. has also acquired the stock of the British-Mexican Petroleum Co., Ltd., which was for several years important as the European fuel oil marketing connection of the Pan-American Petroleum & Transport Co.

Big Fuel Oil Marketer

"The British Mexican Petroleum Co. has large marketing facilities in Great Britain, particularly for the purpose of supplying transatlantic trade with marine oil. It has stations at Southamption, Liverpool, Avonmouth, South Shields and Glasgow with facilities for handling oil at Thames Haven. The company has also an important fleet of tanker vessels which will now be operated as a portion of the already extensive shipping facilities of the Pan-American Petroleum & Transport Co.

"The Pan-American Eastern Petroleum Corp. has been organized through the election of directors as follows:

"Elisha Walker and Hunter S. Marston, partners in the banking firm of Blair & Co., New York; E. R. Tinker, Jr., president of the Chase Securities Corp. of New York; Robert W. Stewart and John D. Clark, officers of the Standard Oil Co. Indiana, Fred H. Wickett, president, Dixie Oil Co., (a Standard of Indiana subsidiary); Lord Inverforth, the managing director of the British-Mexican Petroleum Co., Ltd., and an important figure in British petroleum and shipping industries.

"The officers of the new company are the following:

"Elisha Walker, chairman of the board of directors; Fred H. Wickett, president, Hunter S. Marston, vice-president, and Edward F. Hayes, secretary and treasurer.

"At a meeting held today (April 1) the board of directors of the Pan-American Petroleum & Transport Co. was reconstructed to include the following:

The New Directorate

"F. H. Wickett, chairman of the board; Herbert G. Wylie, President, Robert W. Stewart, chairman of the board of directors, Standard Oil Co of Indiana; Edward G. Seubert, vice-president, Standard Oil Co. of Indiana; John D. Clark, vice-president, Standard Oil Co. of Indiana; Elisha Walker, Blair & Co., Inc; Hunter S. Marston, Blair & Co. Inc.; Edward F. Hayes of Blair & Co., Inc.; Harold Walker, an executive officer of the company; Paul H. Harwood, in charge of the company's ocean fleet, J. J. Cotter, vice-president of the company, and Frederick Ewing, general manager of the sales department.

Edward G. Seubert
Vice-President, S. O. of Indiana

"F. H. Wickett becomes chairman of the board of directors of the Pan-American Petroleum & Transport Co. The operating management of the Pan-American company remains unchanged. Herbert G. Wylie, who as president of the company has had jurisdiction over its affairs, will continue as president. Mr. Wylie was for many years in operating control of the company's activities in Mexican oil fields, and has had unusual experiences qualifying him for this executive responsibility; the other operating departments of the Pan-American Petroleum & Transport Co., as they are in charge of unusually skilled experts, will continue under the same management as heretofore.

"The Pan-American Petroleum & Transport Co. was organized by E. L. Doheny, the pioneer in Mexican oil development and owns substantially all the stock of the Mexican Petroleum Co., which under Mr. Doheny's control, has for many years been one of the largest crude oil producers in the world.

Big Mexican Holdings

"The Pan-American company thus controls large proven areas in the Mexican oil fields. These areas have undergone important changes in the months during which negotiations with Mr. Doheny have been in progress, and the purchase of his stock was confirmed following an expert field examination recently concluded by Col. Robert W. Stewart, Fred H. Wickett, and their technical assistants.

"During the past several years, Mr. Doheny has devoted much of his time to expanding and developing the oil activities of the Pan-American Petroleum & Transport Co. in California, all the stock of which, through an intermediate subsidiary, is owned by the Pan-American Petroleum & Transport Co. As soon as the necessary steps can be taken a plan will be announced for the sale, by the Pan-American Petroleum & Transport Co., of its stock holdings in the California company, to a new company to be known as the Pan-American Western Petroleum Corp., organized by Mr. Doheny for that purpose. The stockholders of the Pan-American Petroleum & Transport Co. will be offered the privilege of subscribing pro rata to stock in the new Pan-American Western Petroleum Corp.

"The marketing operations of the Pan-American company have always been in entirely different areas from those covered by the operations of the Standard Oil Co. of Indiana. By this plan the Pan-American company also acquires the benefit of the advice and experience of the technical and operating staffs of the Standard Oil Co.

"It is the belief that through the co-operation of these two companies, great opportunities will accrue to both as well as to the communities whose petroleum requirements they have hitherto sought to aid in supplying. The new plan also affords an assured outlet in England through the British Mexican Petroleum Co., Ltd., or products of the Pan-American Petroleum company.

"The plan which has now been consummated does not involve any exchange of stock, any new financing or the offering of any new securities other than the rights which will be offered to Pan-American Petroleum & Transport Co. stockholders to subscribe to the new stock of the Pan-American Western Petroleum Corp."

Acquisition of the stock of the British Mexican Petroleum Co. carries with it in addition to the European fuel oil business, a considerable interest in, possibly control of, the Lago Petroleum Co. which has large petroleum concessions in Venezuela including the rights to pro-

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Coming Meetings

National Petroleum Assoc., Hotel Riverside, Cambridge Springs, Pa., April 22, 23.

Assoc. of Natural Gasoline Manufacturers, Mayo Hotel, Tulsa, Okla, April 22, 23.

Minnesota Petroleum Assoc., West Hotel, Minneapolis, Minn., April 22, 23.

Natural Gas Assoc., Atlantic City, N. J., May 18, 19, 20, 21.

National Association of Purchasing Agents, Milwaukee Auditorium, Milwaukee, Wis., May 25 to 28.

Crude Price Changes

April 2.—Joseph Seep Purchasing Agency reduced Corning, O., crude 15 cents to $2.10 per barrel.

April 3.—Ohio Oil Co. reduced Wooster crude 10 cents to $2.15 per barrel.

Late Tank Wagon Changes

April 7.—Standard Oil Co. of New Jersey reduced tank wagon and service station prices of gasoline 1 cent throughout its territory except in West Virginia, which was unchanged, and South Carolina, where the cut was only one-half cent.

Kerosene was reduced one-half cent throughout the territory, except at Baltimore, Md. This was the first change in kerosene prices since July 12, 1924.

FORT WORTH.—E. M. Closuit, formerly division geologist for the Gulf Production Co. here, has resigned to enter consulting work. He is succeeded in the local office by J. D. Thompson, jr., who has represented the Gulf at Amarillo for several years.

Correction

In its account of the prize drawings held at the convention of the American Oil Men's Association in Kansas City, in its March 25th issue, page 37, the name of S. F. Bowser & Co., was omitted as donor of the complete golf outfit, which was won by Henry Stoltz, Bartles-Maguire Oil Co., Milwaukee.

The Bowser company arranged with the association to donate this prize and it was through error its name was not given among other companies giving prizes.

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Marketing Summary

Oklahoma-Kansas—Lubes and fuel oil steady. Other products slip.

North Texas.—All products quiet; prices easy.

Chicago.—Gasoline demand is good but prices weaken. Kerosene firm. Gas oil weak. Fuel steady.

Pennsylvania.—Gasoline and fuel oil firmer. Neutrals and cylinder stocks slightly steadier. Wax weaker.

Gulf Coastal.—Quiet, prices unchanged

New York Export.—Gasoline demand slightly better. Kerosene easier. Gas oil cheaper. Bunker steady. Waxes and lubes softer.

New Orleans Export.—Competition for export business drives prices down. British and French buyers leave market when prices waver. Cased gasoline demand picks up. Kerosene easier. Bunker oil little changed. Gas oil quiet. Wax weaker.

(Continued from page 18)
pect for oil under the shallow waters of Lake Maracaibo.

Mr. Doheny issued this statement:

"Interests controlled by my family today consummated the sale of a majority of the voting stock of the Pan-American Petroleum & Transport Co. We have not, however, partcd with all interest in that company. On the contrary we remain owners of larger number of shares of the company's stock than any other stockholder excepting only Pan-American Eastern Petroleum Co., the purchaser in today's transaction.

"I have retired from the chairmanship of the board of the Pan-American Petroleum & Transport Co. but remain chairman of the board of directors of its California subsidiary, the Pan-American Petroleum Co. It is contemplated that shortly there will be organized a new company to take over this California subsidiary, and every stockholder in the Pan-American Petroleum & Transport Co. will be offered an opportunity to participate in the western company. It is my intention to have a continuing and active part in the management and development of the Pacific coast properties, including the California naval petroleum reserve.

"I am confident of the continued success of the business of the company, which I brought into existence and am gratified by the knowledge that I retire from the eastern end of business at a time of the greatest prosperity thus far enjoyed. I expect that this prosperity will not only continue, but increase."

Doheny's Standard Oil Successors Come Mostly From the Ranks

CLEVELAND, April 6.—Col. Robert W. Stewart who engineered the deal by which the Standard Oil Co. of Indiana attained control of the foreign and eastern United States properties of the Pan-American Petroleum & Transport Co., thereby making him a commanding figure in world petroleum circles, arrived at his position of leadership by way of the counselor's office.

One might say Col. Stewart started in the ranks of the company and finally became its head and in control of close to a billion dollars' worth of property. It is true Col. Stewart never worked on a derrick floor, nor fired a still, nor drove a tank wagon when tank wagons were wagons and not five ton trucks. But the colonel started with the company actually as a local legal agent on the frontier of the company's business territory.

Col. Stewart was born on a farm near Cedar Rapids, Iowa, and in 1886 was graduated from Coe College, Iowa. He was graduated with honors from Yale Law School in 1890 and looking about for a location decided to settle in Pierre when that town was selected to be the capital of South Dakota.

There he represented at various times during his 17 years' residence several important corporations including the Standard, the International Harvestor Co., and the Chicago & Northwestern railroad. He also was state senator for two terms.

During the Spanish-American war he was a major with the famous "Rough Riders." He returned to reorganize the South Dakota National Guard and was its colonel.

Col. Stewart went to Chicago in 1907 as general attorney for the Standard and in 1914 was made general counsel. He was elected a director in 1915 and in 1918 became chairman of the board. Under his guidance the Standard has expanded rapidly. The number of stockholders in the company has grown from 4500 to 50,000; the par value of the stock has been reduced from $100 to $25 a share to make it available to more people. He fostered the employes' stock purchase plan under which 15,000 employes have become stockholders in the company. He also put through the annuity plan, death benefit insurance and an industrial relations plan under which employes have a voice in the questions of wages, hours of labor, working conditions and other things affecting their welfare.

Fred H. Wicket who succeeds E. L. Doheny as chairman of the board of the Pan-American Petroleum & Transport Co., practiced law in Chicago until 1917 when he helped to organize the Dixie Oil Co. to whose business he has devoted himself since. The Standard of Indiana bought the Dixie in 1919 and Mr. Wickett remained at its head. He was born at St. Thomas, Ontario, 52 years ago.

John D. Clark
Vice-President, S. O. of Indiana

Edward G. Seubert, director, vice-president, secretary and treasurer of the Standard of Indiana, and a director in the Pan-American Eastern came up from the ranks. He is a product of the Whiting refinery where at the age of 15 he became a mechanic's helper. He then became a general clerk, then a cashier from which position he has risen rapidly.

John D. Clark, vice-president and assistant to the chairman of the board of the Standard of Indiana, entered the oil business from a Cheyenne, Wyo., law office. He lived in Cheyenne until 1919 when he joined the Midwest Refining Co. at Denver, in charge of its legal department. He became executive vice-president and in 1923 was elected a director of the Standard of Indiana which had bought control of the Midwest.

Mr. Clark was graduated from the University of Nebraska in 1905 and from Columbia University law school in 1907.

Short Pipeline to Dale Handles Gulf Oil

HOUSTON, April 2.—Kampman & Eggleston of San Antonio are constructing a 3-inch short pipeline from Brewer lease production of Storey & Lefevre, in the Lytton Springs field, northern Caldwell county, to the town of Dale. They have contract to handle oil of the Gulf Production Co., from its Beatty least, to tank car loading rack at Dale on a basis of 10 cents a barrel transportation charge.

An Apology

IT is not the policy of National Petroleum News in any articles surveying equipment and processes, to compare one with another. This paper's aim has always been, on the contrary, to gather and report all the facts possible regarding processes and methods and their equipment in such accuracy and wealth of detail as will permit its readers to make such comparisons as they may desire.

It was therefore an error in the carrying out of this policy, that National Petroleum News in an article on page 72 of its March 4 issue made a comparison between the operation of the Cross process and the Jenkins process. This comparison is herewith withdrawn and our apologies offered to those controlling the Cross process, because cost figures in any one case should not be taken as proof of how the process might operate in another plant. Operators of plants, kind of crude run, the operating policy of a plant, all can so differ that the comparison above referred to cannot be taken as fair.

National Petroleum News

Compilation Of Mid-Continent Refinery Operations

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Refiners in Mid-Continent Draw On Stocks of Gasoline

Staff Special

TULSA, April 7

IN THE week ended April 3, 118 Mid-Continent refiners who report to National Petroleum News decreased their charges to stills 21,471 barrels on the daily average which totaled 285,565 barrels. Daily runs to stills exceeded only slightly those for the week ended March 6, when they averaged 282,029 barrels, after which they gradually climbed to 307,036 barrels daily in the week ended March 27.

Runs were decreased in all states except Louisiana and Arkansas. Kansas refiners reduced runs 5541 barrels per day to a daily average of 66,767 barrels. Runs at Oklahoma plants were decreased 8020 barrels daily to 95,553, a reduction of 13,391 barrels daily in the last two weeks. Throughput at Texas plants were decreased 19,944 barrels per day, the greatest decline in any state, and averaged 79,300 barrels. Louisiana-Arkansas refiners increased runs 3034 barrels daily average.

Gasoline stocks were reduced 1,719,297 gallons, the first decrease since week ended Feb. 27. One feature of the report was the movement of gasoline from Louisiana-Arkansas plants, from which shipments were 3,584,811 gallons against production of 2,216,047 gallons.

Oklahoma refiners produced 9,752,957 gallons, and shipped 10,631,670 gallons. Gasoline shipments from all plants were 28,429,054 gallons compared with 25,700,820 gallons the previous week.

Summary for Last Four Weeks

Production and shipments, all reporting refineries for four weeks ended April 3. Change in stocks figured from March 6.

Gasoline	**Gallons**
Production	112,140,053
Shipments	101,315,824
Net change in stocks	10,824,229
Ratio sales to production	90.3%
Kerosene	**Gallons**
Production	26,648,033
Shipments	26,225,346
Net change in stocks	422,687
Ratio sales to production	98.4%
Gas and Fuel Oils	**Gallons**
Production	157,490,663
Shipments	158,082,711
Net change in stocks	—592,048
Ratio sales to production	100.4%

Production of kerosene was 5,846,692 gallons, or 990,130 gallons below that of the previous week. Shipments were 5,690,696 gallons, against 7,261,062 gallons last week. Stocks were reduced in Oklahoma, and north Louisiana and Arkansas, but these reductions were offset by gains in other states. Total stocks were 20,636,459 gallons, an increase of only 155,996 gallons.

Gas and fuel oil shipments were slightly below production and stocks increased 348,229 gallons. Shipments from Texas plants were 12,798,207 gallons, compared with 10,817,933 gallons the previous week. Shipments were 38,335,510 gallons, against 37,496,499 gallons the previous week.

At the rate of shipments maintained last week stocks of gasoline at the 118 reporting plants represented 21 days' supply, kerosene stocks represented 25 days' supply and gas and fuel oil stocks represented 22 days' supply.

The table covering shipments and production for four weeks ended April 3, show that during the 28 days gasoline shipments represented 90.3 per cent of production and stocks were increased 10,824,229 gallons. Kerosene shipments were 98.4 per cent of production and stocks increased 422,687 gallons. Shipments of gas and fuel oil exceeded production and stocks were reduced 592,048 gallons.

Mid-Continent Refinery Operations Week Ended April 3 (*By Special Telegraph Service*)

	Kansas	%Change Previous Week	Oklahoma	%Change Previous Week	No. & Cent. Texas	%Change Previous Week	No. La.-Ark.	%Change Previous Week	Total	%Change Previous Week	Totals Week Ended Mar. 6
No. of Plants	21		45		38		14		118		118
Da. Still Cap. (bbl.)	95,700		154,400		133,300		50,900		434,300		434,400
Da. Av. Crude Run	53,937		82,635		68,024		35,944		240,540		241,271
Da. Av. Other Oils	12,830		12,918		11,276		8,001		45,025		40,758
Da. Av. Total to Stills	66,767	— 7.7	95,553	— 7.7	79,300	—12.1	43,945	+ 7.4	285,565	— 7.0	282,029
GASOLINE—Gallons											
Stocks Mar. 27	20,894,551		40,361,650		16,945,190		6,859,504		85,060,895		71,451,964
Prod. 3-27 to 4-3	7,069,683	— 9.3	9,752,957	— 7.1	7,671,070	— 7.6	2,216,047	+11.5	26,709,756	— 6.6	26,673,657
Ship. 3-27 to 4-3	6,890,354	— 3.8	10,631,670	+18.9	7,322,219	— 8.5	3,584,811	+125.5	28,429,054	+10.6	25,608,252
Stocks April 3	21,073,880	+ 0.9	39,482,937	— 2.2	17,294,041	+ 2.1	5,490,740	—20.0	83,341,598	— 2.0	72,517,369
Ratio Sales to Prod.	97.4%		109.0%		95.5%		161.8%		106.4%		96.0%
KEROSENE—Gallons											
Stocks Mar. 27	4,762,269		9,968,735		5,130,677		618,782		20,480,463		19,343,725
Prod. 3-27 to 4-3	1,596,560	—14.2	1,883,143	—31.5	1,882,152	+ 8.3	484,837	— 0.8	5,846,692	—14.5	7,194,517
Ship. 3-27 to 4-3	1,391,255	—31.6	2,096,771	—23.8	1,678,699	—15.7	523,971	+ 8.0	5,690,696	—21.6	6,324,470
Stocks April 3	4,967,574	+ 4.3	9,755,107	— 2.1	5,334,130	+ 4.0	579,648	— 6.3	20,636,459	+ 0.8	20,213,772
Ratio Sales to Prod.	87.1%		111.3%		89.2%		108.1%		97.3%		87.9%
GAS AND FUEL OILS—Gallons											
Stocks Mar. 27	12,011,497		47,580,689		45,928,577		12,334,956		117,855,719		118,515,938
Prod. 3-27 to 4-3	6,845,511	+ 3.1	12,324,773	+ 2.5	11,129,477	+ 2.1	8,383,978	+ 6.6	38,683,739	+ 3.3	36,463,787
Ship. 3-27 to 4-3	6,975,624	+26.8	11,277,629	—15.8	12,798,207	+18.3	7,284,050	— 6.4	38,335,510	+ 2.2	36,183,729
Stocks April 3	11,811,384	— 1.1	48,627,833	+ 2.2	44,259,847	— 3.6	13,434,884	+ 8.9	118,203,948	+ 0.3	118,795,996
Ratio Sales to Prod.	101.9%		91.5%		115.0%		86.9%		99.1%		99.2%

John Hays Hammond Advocates Unit Operation of Leases

By A. E. Heiss
N. P. N. STAFF WRITER

WASHINGTON, April 7

JOHN HAYS HAMMOND, mining engineer of world wide reputation, is of the opinion there is waste in the oil industry which can be reduced "very largely by improved methods in the industry itself, and a form of conservation which does not mean setting aside lands for future development, but rather a tendency toward improving the present processes in the industry all along the line, from production to the sale of the product."

Mr. Hammond is also an advocate of the unit development of producing properties by voluntary agreement among operators if that is possible. He believes that, in fields where the ownership of the surface is broken up among many individuals, legislation will be necessary to back up the efforts of the oil companies.

These views are expressed in his answer to the questionnaire of the Federal Oil Conservation Board, which he has just made public.

It is further his opinion there is no "immediate danger of a failure to meet this country's oil requirements.*** The future output of petroleum in the United States cannot at the present time be predicted with any degree of assurance. Under the stimulus of higher prices and the assistance of a constantly improving technique, the future production of petroleum in the country, will be much greater than that indicated by most of the predictions that have been made. Nevertheless, it is a fact, as has been emphasized by the Geological Survey, that petroleum is a wasting asset and that each pool exploited leaves one less to be discovered. And, although the actual extent of the reserves cannot be satisfactorily predicted in terms of barrels, when expressed in terms of constantly increasing consumption, the reserves, whether double, treble or even greater than any estimates that have been made, are indeed limited."

Controlled production is his solution. The unit development lease, to his view, is the best means of control, except in cases in which the United States government is the proprietor of the whole of a geologic structure containing oil. Putting Osage Indian lands on the market when there is an oversupply, he thinks is unwise.

"The country is fortunate" Mr. Hammond states "in its enormous reserves of oil shale. But it is evident that in order to obtain an output of shale oil, approximating our present production of petroleum, the development of an enormous industry must be required. In an emergency, as in time of war, the availability of this resource should not be overestimated.

"No practical means of anticipating shortage by preferential use occurs to me that will be as effective as the working of supply and demand in a free market. As prices go up, consumers will determine for themselves which uses of petroleum are to be preferred. Consumers can decide more intelligently, however, if the violent fluctuations in prices due to periodic gluts and shortages can be overcome. This emphasizes again the importance of unified or controlled operation in order to permit supply and demand to work in orderly fashion."

The foregoing is a part of the answer Mr. Hammond has made to the questions asked by the Federal Oil Conservation Board. That body is holding, in secret, the answers that are being given. A few men, like Mr. Hammond, have given out copies of their answers, or abstracts of the answers. The board is going over the answers that have been received. In time it will allow those interested to know what leaders of thought in the industry and those near it think about the situation. Just when that time will come has not been indicated.

Answering questions as to overproduction, if any, and the causes therefor, Mr. Hammond said:

Defines Overproduction

"In my opinion oversupply may be said to exist as long as oil is forced on the fuel market in regions that have accessible supplies of coal. In view of the much higher efficiency obtained in the internal combustion engine, the oil operator who has to dispose of his product in competition with cheap coal is sacrificing it for less than what it is really worth. Not until the demand for higher uses of petroleum products has been developed to a point where it is no longer necessary to sell oil for boiler fuel east of the Sierras will the period of overproduction be really over."

The element of chance in the discovery of new pools "and the inability of the industry to retard the exploitation of pools when found," he said, were the causes of overproduction. "The industry is compelled," he added "by the present competitive conditions to develop a field as soon as it is found, without regard to the effect on the market. The number of flush pools that may be producing at one time is largely a matter of chance. The chance may cause overproduction one year and under production the next, for the same forces that compel the exploitation of a new pool, regardless of the market, prevent its being held for a few months to relieve a succeeding period of underproduction.

Effect of New Capitol

"Other causes of over production have been enormous rush of new capital into the industry, and particularly into the producing end since the war; improved methods of transportation of oil and its products; and the inability of our storage oil above ground to stabilize the price of crude owing to the high prices at which it was accumulated."

One of the questions asked by the conservation board was: "Under the present methods of producing oil, what is your estimate, in volume, of the waste of oil and gas? Can you list the principal causes and suggest means of reducing or avoiding the waste?" In answer to those questions Mr. Hammond said:

"It is difficult to arrive at any definite waste in oil and gas from present methods of production. This subject has been discussed and answered in detail under question No. 1 and I am of the opinion that engineering practice in producing and flowing oil is steadily improving. The improved conditions can be listed as follows:

1. Careful bringing in of wells.
2. Systematic casing practice, with good water shut-offs.
3. Greater recovery from individual wells by using regulated back pressures, instead of flowing the wells wide open.
4. Greater recovery by artificial methods, i.e. application of gas, air or water to oil formations.
5. Accurate knowledge of exact producing horizons; elimination of oil and gas losses by not perforating too many sands at once.
6. Improved methods of extraction of gasoline, from casinghead gas.
7. Extraction of gasoline from gas off tanks.
8. Better storage methods and tank equipment.
9. Better pipe line practice and oil distribution from field to refineries or markets.
10. Greater extraction of gasoline and other products from crude oil by constantly improving refinery practice.

"The application of those improved practices would be greatly facilitated by unit operation of each producing field.

That they have not been more generally adopted is due less to any lack of desire to prevent waste on the part of the oil companies than to the operative conditions surrounding the industry.

"Do you regard changes in technical methods in the production and consumption of oil as promising relief in reducing the present high percentage of waste, or do you recommend changes in laws governing possessory rights in oil and gas as necessary to avoid the present scramble for oil? Do you as an alternative to legislation see any promise in co-operative agreements providing for the unit leasing or unit operation of all the land in an oil pool?"—Another question from the board, and Mr. Hammond's answer follows:

"Improved methods in the production and consumption of oil undoubtedly promise much relief in reducing the present waste in the oil industry. Better technical methods are being put into practice now than at any time in the past, and these will be further improved as time goes on. As stated under Question 3, I do not believe that any limitation on possessory rights should go to the point of requiring an owner to hold his land without development for a long period in anticipation of a future shortage, for such a requirement would amount to confiscation of vested rights and would be unconstitutional.

Unit Operation of Pools

"It is noted, however, that under present conditions the owner is not secure in his possessory rights because the action of an adjoining owner may do him irreparable harm. Unit operation of all the lands in an oil pool would clearly benefit the owners thereof as a group, and, it seems to me not unreasonable to require all owners in such a pool to participate in a common plan for its development.

"Legislation providing for unit development, in my opinion, would be a logical growth of the idea that no man may use his private property in such a way as to injure others in the possession of theirs, an idea that is firmly established in our law. In my opinion therefore, a law requiring that all owners in a given pool should develop their property through some form of unified operation, details of which may be provided by the law, would be a forward step, provided always that it did not interfere with the rights of the owners collectively to decide when and on what terms they would develop it. Any law, however, which confiscated possessory rights by forbidding drilling under any circumstances would destroy initiative and remove the incentive to exploration and wildcatting, which are indispensable to the welfare of the country.

"I believe that the proper application of the community lease offers much promise. Wherever the private interests can agree among themselves on a plan of development that will preserve the principle of unit operation the community lease requires no legislation.

"I am convinced, however, that in the typical oil pool of the Mid-Continent and California oil fields, where the ownership of the surface is broken up in the hands of many individuals, the community lease will seldom succeed unless backed by legislation. We can all think of instances where a single land-owner or operating company has forced the immediate development of the field, by declining to go along in what the general sense of the other owners regarded as the wise course. Hence the need of legislation by which a decision of a majority of the owners upon the question as to when to drill and how to drill may be made binding upon all other owners in the pool.

Curb Reckless Operators

"Any such principle will, of course, have to be applied in such a way as not to discourage the prospector. One wholesome result of the community lease will be to curb the activities of the reckless operator who is very frequently a stock-selling promoter."

Another question which Mr. Hammond answered was, "Under present conditions is oil being produced and used as fuel that could and should be replaced by coal? What is your estimate of the amount, if any, of this oil as fuel and what are the effects on the oil industry?"

Answering that, Mr. Hammond said: "Out of a total consumption of 740,000,000 barrels of all products and crude in 1923, in the United States, the oil industry sold a total of 384,000,000 barrels of fuel oil or approximately 52 per cent. A statistical study of the distribution of this oil showed that 230,400,000 barrels, or 60 per cent of the total fuel oil sold, could have been marketed at a price higher than coal in 1923. This leaves a balance or surplus of 155,600,000 barrels, or approximately 40 per cent which the industry, in 1923, was compelled to sell in direct competition with coal.

"The estimated average price at which the entire amount of 384,000,000 barrels of fuel oil was sold was $1.10 per barrel and this represented a direct economic waste to the oil industry, since the whole amount of fuel oil marketed was sold at a price fixed actually by this surplus of 40 per cent. Indeed the surplus affected adversely the price of all petroleum products.

"This was the condition in 1923. But in a larger sense, it is an economic waste to use oil as boiler fuel in any part of the U. S. outside, perhaps, California, Oregon, and those portions of the southwest where long freight hauls make the price of coal excessively high. A fuel that will give 30 per cent efficiency in the internal combustion engine ought not to be used under steam boilers where it will give only 10 or 15 per cent. The saving of this oil for higher uses will require improvements in refining practice but with a better adjustment of supply and demand these improvements will come.

Competition With Coal

"The withdrawal of fuel oil from markets that can properly be supplied by coal will work no hardship upon consumers. Our industries and railroads will still have the cheapest fuel in the world.

"The small oil house furnace has taught many of our people that there is a means of escape from the annoyance of shovelling coal and handling ashes. It has created a demand that will, in turn, bring about the necessary technical development. It remains for the coal industry to perfect ways of burning coal that will give the same kind of service as the oil furnace. This can be done and the cost of house heating reduced below the present level. Even the use of fuel oil at sea, where the great saving of space may appear to justify the sacrifice of thermal values, is likely to give way to the use of the Diesel engine.

"I am more concerned about overproduction in oil because of the harm it brings to the great sister industry of coal mining."

High Points in Answer of John Hays Hammond to Oil Board's Questionnaire

PRESENT waste will be reduced by improving operating methods within the industry.

Favors unit development of leases, by agreement among oil companies if possible. Legislation to back up the oil companies will probably be necessary.

No immediate danger of failure of oil supplies to meet the country's oil requirements.

Rush of new capital into the industry one cause of over-production. Another is inability of the industry to retard development of new pools when discovered.

Oil industry should not be competitive to the coal industry, but complementary, the two industries working together to prevent temporary gluts of crude production, when surplus displaces coal.

Quashing of Indictments Seems to Kill Teapot Dome Prosecution

WASHINGTON, April 7

UTTER collapse of the government's Teapot Dome and Elk Hills naval reserve cases, both criminal and civil, it is believed, is foreshadowed by the quashing of all indictments against Albert B. Fall, Edward L. Doheny, Edward L. Doheny, jr. and Harry F. Sinclair, in the District of Columbia on the ground that Oliver E. Pagen, a special assistant to the attorney general was illegally in the grand jury room when the indictments against the oil men were prepared.

Chief Justice McCoy held the indictments, charging bribery and other forms of fraud in the making of the leases, invalid on what looks like a pure technicality.

Those who know about Oliver E. Pagean do not regard the point as so much of a technicality as appears. For a score or more of years, whenever the government opined that some one should be indicted, Pagen had been dispatched to the grand jury room. He is usually mentioned as the government's expert in the preparation of indictments.

In recent years there has been a suspicion that he has been doing more than advising with grand jurors as to the form of an indictment to be voted. There has been a suspicion that he has been advising grand jurors not merely how, but when, and why, they should indict. Whether that impression rests upon good or ill grounds is not the point. The point is that it exists.

Coming on the heels of the failure of the government, at Cheyenne, to connect up the bonds delivered to Fall's son-in-law with the bonds that were bought by the Continental Trading Co. Ltd., this quashing of the indictments, returned June 30 last, tends to create the impression that there is small chance of the government making good on the vast amount of material threshed over in the senatorial investigations.

Attorneys for Fall, the Dohenys and Sinclair, immediately after the announcement of the quashing, asserted that their clients could not be tried on accusations of bribery or fraud because the statute of limitations had run; that is more than three years had elapsed since the commission of the crimes, if if any were committed.

However, it was admitted that charges of conspiracy to commit crimes and to deprive the government of its lands could be returned and the men in the Teapot Dome and Elk Hills leases brought to trial on that catch-all charge. not of committing a crime or crimes but on planning to do so, in the way known to the law as conspiracy.

Prison terms can be awarded to those found guilty of conspiring quite as uncomfortable as those for the commission of crimes. It is believed the government will undertake something of that kind, rather than admit that it had failed.

But for the legislation enacted about a year ago, directing the president to employ "special counsel" for the prosecution of the cases against Fall and others concerned in the leasing arrangements, the ground upon which the indictments were quashed could not have been alleged. Under the general law, enacted in 1906, Pagen would have had the right to be in the grand jury room. But the legislation enacted last spring directed that the attorney general have nothing to do with the prosecution. Congress had no confidence in Harry M. Daugherty, the then attorney general. Therefore it shut him out of the case. Pagen is an assistant to the attorney general. Therefore, when he went into the grand jury room the attorney general, who had been specifically excluded, went into the grand jury room. Criminal law is precise and technical. Justice McCoy, a Democrat from New Jersey is regarded as a man having small regard for technicalities. For that reason his ruling that the disregard of the statute of last year is a vital thing, is looked upon as something more than the mere observance of a technicality. The general law of course requires that grand juries be left absolutely free from outside influences. That means that no one other than the properly designated persons shall be in communication with them while they are working.

Attorneys for the indicted men moved to quash the indictments not only for the ground upon which they were quashed but upon the allegation that Senator Walsh broadcast a speech about the naval oil leases while the grand jury was in session with a view to influencing it. Another ground was that Peyton Gordon, the district attorney also had no right to be in the grand jury room. A third ground was that the indictments were invalid because they were signed by Atlee Pomerene and Owen J. Roberts as "special assistants to the attorney general."

It appeared that Pomerene and Roberts signed the indictments in that way so as to make it appear that they were in the grand jury room in accordance with the terms of the law of 1906 as well as the law of 1924. The judge said it made no difference it they were appointed as special assistants to the attorney general that they had a right in the grand jury room as special counsel and that the signature of the foreman of the grand jury alone would have been sufficient to make the indictments valid.

As to the plea in abatement (plea for quashing) that Walsh's speech was broadcast with a view to influencing the grand jury, Judge McCoy said it did not appear that any member of the grand jury heard it or that if he did, he was influenced by it nor that the indictment was not procured by lawful evidence.

Therefore all pleas, except the one about Pagen's presence being in disregard of law, were overruled.

It was pointed out that, assuming there was reason for the government undertaking either the civil or criminal cases, it had been unlucky in the fact that the indictments which have just been quashed were what made it impossible for the government to call upon either Fall or Sinclair for testimony regarding the operations of the trading company which was alleged to have bought the bonds which later were turned over to Fall or his son-in-law. Inasmuch as the government could not find Col. R. W. Stewart or get any testimony from Osler or O'Neil it could not connect up the bonds in the hands of Fall or his company as having been procured by the trading company.

The government has decided to take an appeal from the decision of Chief Justice McCoy. After the government announced that an appeal would be taken attorneys for the indicted men, in a public statement admitted the possibility of proceedings under the bribery charge by saying "it may not be possible to proceed further on the bribery charge unless today's decision is reversed. The $100,000 loan transaction involved between Fall and the Dohenys occurred November 30, 1921, and appears to fall within the three-year statute of limitations. Conspiracy charges, however, appear to be within an amendment to section 1044 of the Revised Statutes, enacted Nov. 17, 1921, providing for a six-year limitation period for offenses involving attempts to defraud the government."

Lightning Hits Eldred Refinery Tailhouse

WARREN, PA., April 6.—A limited amount of refining has been resumed by the Pennsylvania Oil Products Refining Co. at its Eldred plant which suffered a $25,000 fire on March 26. Lightning struck the tailhouse destroying it and the run down lines. Seven streams of gasoline were running into the house when it was struck, M. F. Cowden, president of the company, said, but the flames were confined almost entirely to it.

It has been necessary to replace all of the run down lines and part of runway but operations were resumed on a temporary basis last week. It is expected the plant will be in full operation again late this week.

How Natural Gasoline Association Has Stabilized the Industry

By J. C. Chatfield
N. P. N. STAFF WRITER

TULSA, April 6

THE Association of Natural Gasoline Manufacturers will celebrate its fourth birthday at its convention to be held at the Mayo hotel here on April 22 and 23. Although a youngster in years, the association is quite lusty both in size and activity.

Although the commercial value of gasoline from natural gas was discovered in the latter part of the last century, it was not until nearly 30 years later that the manufacturers of natural gasoline banded themselves together to protect and advance the interests of their industry.

A. V. Bourque, who has been secretary of the association since the early days of its organization, asserts that Mrs. Necessity who is claimed to be the mother of the child, Invention, may well have added Natural Gasoline to her family. Events of the winter of 1920-1921 had served to demoralize and discourage the natural gasoline industry. It faced almost entire elimination.

On April 21, 1921, a group of manufacturers gathered at Tulsa to try to find a way out of the woods. This meeting resulted in organization of the association, the manufacturers agreeing that they needed close co-operation to work out their difficulties.

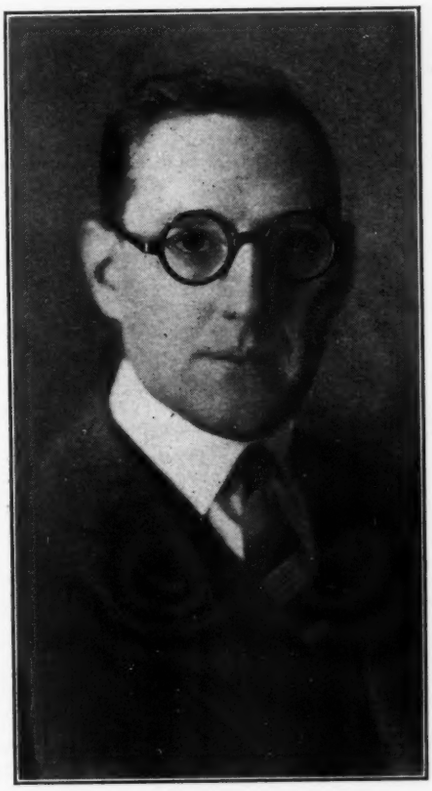
The association, laying down a policy combining the strictest economy with intensive work, concentrated upon its own special and vital problems. Following the short period of "kerosene blends," the most disastrous in the history of the natural gasoline business, the industry found itself with a discredited product, a condition, however, which could not be laid entirely at its own doors.

Worked From Within

Avoiding the mistake of beginning at the marketing end of the business, it was believed that the greatest good would be accomplished by commencing at once with the internal and intrinsic problems of the industry. It was felt that if natural gasoline manufacturers set their own house in order the satisfactory solution of the external or marketing problems would follow and that their commodity would logically and naturally take its true position in the price scale of petroleum products.

One of the first and real important steps in clearing the way for natural gasoline was the adoption of standard specifications. Because of the general ignorance, much high gravity raw gasoline and numerous inferior blends were being put into markets where they had no rightful place. The specifications committee of the Association of Natural Gasoline Manufacturers worked hard to eliminate the undesirable products. Recognizing the fact that the product must be stable and that there must be standard grades, the committee evolved a set of specifications which were adopted by the association.

For the first time in the history of the industry, buyers, by means of these



A. V. Bourque, Secretary
Association of Natural Gasoline Mfrs.

specifications, were able to secure not only a desirable product but one which would fit their individual needs. It was the fearlessness of the association in discouraging the manufacture of inferior blends of natural gasoline which won it instant recognition from its own and from other branches of the petroleum industry.

The specifications for the various grades of natural gasoline have been changed twice by the association. With the improvements in methods of manufacture several new grades of gasoline were produced and the specifications in use at the present time cover grades which are considered standard throughout the industry. These standard specifications have become part of the fabric of the business.

On account of the wide recognition and use of natural gasoline by refiners, consumers have available a better motor fuel than ever before—better in that it has a lower initial boiling point and more uniform distillation curve; thereby giving the motor more active power, improving starting and acceleration, saving the battery, greatly reducing carbon deposits, and in general, increasing the satisfaction and economy of operating an automobile.

Probably one of the most important reasons why the association has prospered and stimulated so much interest among its members, has been the policy it has adopted of working out manufacturing problems in co-operation. Meetings of the manufacturers are not given over to discussions of the League of Nations, foibles of congress or the general situation. On the contrary, programs are arranged to give members an opportunity to hear practical discussions of the problems which they are attacking from day to day.

Attendance at the meetings has been very large, due to this policy. At the first convention, held in April, 1922, there were approximately 125 persons registered. A year later the attendance was around 215 and in 1924 there were 400 registrations. It is expected that the coming meeting this month will show a continuation of the steady growth.

One of the most striking things about the meetings of the association is the amount of discussion on the floor which follows the presentation of papers. Plant operators and executives are free to ask and answer questions which are suggested by the papers.

During the past year the association has held a number of plant operators' meetings in the various fields of Oklahoma and Texas. These have been held at manufacturing centers such as Drumright, Tonkawa and Burbank with attendance ranging from 80 to 200 men. Plant problems of every character are discussed and solutions for troubles brought out. These meetings are to be resumed after the annual convention.

The Association of Natural Gasoline Manufacturers has not been backward in taking steps to safeguard the industry. It has initiated or joined with other associations in legislative matters; co-operating with the Bureau of Explosives; forming safety first regulations; in freight rate hearings and has labored consistently in building up the natural gasoline industry. In addition, the association has been represented on refiners, marketers and automotive association programs and has carried the story of natural gasoline to every one interested.

Papers telling the merits of natural gasoline have appeared in trade journals

and have been distributed from the office of the association to the industry at large.

At the time the association was formed, the manufacturers of natural gasoline had no market for a large part of their output and ruinous prices being obtained for what little was being marketed. The main thought was to secure money to meet the pay rolls and the payment of dues in an association was the last thing the manufacturer felt able to do. Notwithstanding this fact, however, there were enough interested companies to carry on the work of the organization until such time as the industry was able to get back on its feet again, at which time the response for members was most gratifying until today the gallonage represented by members of the organization amounts to 58 per cent of the total production of natural gasoline of the United States.

Represents Entire Industry

The Association of Natural Gasoline Manufacturers was not formed nor never has represented any particular interest or interests. It was formed to benefit the whole industry and its members include both the largest and the smallest manufacturers. The board of directors is composed of members of both large and small concerns, each company having an equal voice in the running of the organization.

The association has never posed as an "Independent" organization. It is a fact, however, that none of the so-called Standard companies are members, with the exception of one company whose interest is solely in the selling of gas to natural gasoline manufacturers and not from the standpoint of making natural gasoline.

Mention has been made of the economical policy of the association. The treasurer's annual report has shown all bills paid and a balance in the treasury every year and the present year will probably be no exception. This has been done on receipt of dues alone for one of the gratifying features of the organization is that is has never levied an assessment on its members to carry on the work of the association. When the Saybolt patent threatened, a meeting of the industry in session at Tulsa, composed of both members and non-members of the association, decided that funds were necessary to investigate the merits of the so-called "Improvements" patents; accordingly, a call for voluntary subscriptions was sent out and some $1500. was raised for this purpose. When the question arose of sending the miniature gasoline plant exhibited by the association at the International Petroleum Exposition to the marketers' convention at Cleveland, voluntary contributions were asked for and funds secured for this purpose. It was deemed expedient however not to attempt to move the plant and reassemble it at Cleveland and the money donated was returned to the donors.

Through the education work in its own ranks, the natural gasoline industry, has laid to rest forever many of the vexatious problems of the business. The past few years, the organization has turned its attention to the problems which affect the whole oil business adversely and in connection with the other oil trade organizations it is taking an active part in legislation, both national and local, Interstate Commerce Commission and Bureau of Explosive regulations and freight rates, both interstate and intrastate. As the result, it has become national in scope, not alone by reason of its membership but by its activities as well.

The natural gasoline industry is one of conservation. In the reclamation of a waste product, nearly 4,500,000,000 gallons have been manufactured since 1911, approximating $550,000,000 in value. Improvements in manufacturing methods and marketing have made this large yield possible and the Association of Natural Gasoline Manufacturers deserves not small credit for the achievement.

Liquor Drums Find Way Into Oil Service

CHICAGO, April 1.—Chicago jobbers have been getting some remarkable bargains in steel barrels recently. In fact many of them have been able to take care of their regular season's requirements this spring at about half price. Where they come from is a mystery. Nobody seems to know. But hardly a day passes in a Chicago jobber's office that somebody does not call in by telephone and offer any number of standard "I. C. C. Fives" at prices between $3 and $4 each.

Jobbers who have bought these barrels report without exception that they are O. K. and clean, but every one has that soft familiar smell of grain alchohol. They are offered in practically any quantity, delivered anywhere in the city as second hand drums, used only once. The understanding is that they have been the original containers for shipping liquor from outlaw manufacturers far and near to Chicago bootleggers. The men who sell them make no denial of their origin.

One Chicago company stated recently by telephone that their representatives were able to pick up on an average of 50 such drums every day. They are received in various ways. Often a truck driver with a stake truck load of barrels will be hailed on the street by a stranger and offered a few first class I. C. C. barrels at ridiculously low figures. The driver usually gives the stranger his employer's telephone number and the employer later is able to purchase the barrels C. O. D. his own warehouse.

Sometimes the man who delivers the goods professes to be a junk dealer. Ordinarily no questions are asked. Cooperage firms handling this merchandise make a respectable margin on the goods of course, but even then the oil jobber who is the ultimate consumer is able to buy at $3.50 per barrel. There are no one-time shippers in the traffic, it is said, but all of the best and most expensive type weighing between 80 and 90 pounds. Jobbers say they come well drained; nothing in but the smell

J.F. Lucey Forms Lucey Pet. Co. at Dallas

DALLAS, TEX., April 3.—Capt. J. F. Lucey announces the organization of the Lucey Petroleum Co., a Delaware corporation, with headquarters in the Magnolia Bldg., Dallas, Tex.

The company is capitalized for 100,000 shares, no par value, is a closed corporation, no stock will be available to the public.

Capt. Lucey, formerly in the oil well supply manufacturing business, is president and general manager of the new company. He will now devote his energies to the production end of the oil business.

Capt. Lucey will transfer to the company his producing properties in the McCamey-Sheerin & Lucey holdings in the South Vernon field; his portion of the producing properties owned with the Panhandle Refining Co. in Archer county, as well as his part of the Shaw & Rathke and J. F. Lucey properties there, and his acreage holdings in the Powell-Mexia section. The holdings to be transferred include the personal holdings of Capt. Lucey, but do not include the Lucey & Stewart properties in Arkansas. Other property to be transferred to the new company includes various undeveloped leases in other parts of north central Texas.

The new company is said to have about 1000 barrels of settled production daily and about 3000 acres of undeveloped leases. Intensive campaign is being carried on in the South Vernon field.

K. L. Fish, secretary and treasurer of the company, was formerly with the Lucey Manufacturing Corp. of New York, Capt. Lucey's old company, but with which Capt. Lucey is not connected at present.

H. O. Cavert is in charge of the land, lease, title and production departments. Mr. Cavert was formerly an Independent operator.

Capt. Lucey, well known in oil well supply manufacturing circles, was personal aide to Herbert Hoover in Belgium relief work during the war.

TULSA.—Among recent arrivals in this city is the Okliana Oil Co., formerly of Okmulgee, and now domiciled at 811 Atlas Life building. George B. Rodgers, recently elected secretary-treasurer of the company, has been placed in charge of the new office.

TULSA.—Robert N. Atmore, sales manager for C. C. Fetty & Co., of Eldorado, Kan. has opened a Tulsa office at 404 West First st., in connection with the B. & A. Specialty Co. The Fetty Co. manufactures a long-stroke pumper which it exhibited at the Exposition last fall, and which also is on display at the Industrial Exhibit maintained by the Tulsa Purchasing Agents association.

New York City Tank Truck Regulations Forbid Gravity Unloading

NEW YORK, April 3

PARTICULARLY rigorous specifications for tank trucks for operation in New York have been drawn up by the fire department. The final draft with the approval of the department was issued a few days ago. City officials met with representatives of the larger oil companies when considering specifications, and their first efforts were criticized and somewhat revised.

Only within the last few months were the city regulations amended to permit operations of tank trucks of any description for delivery of petroleum products on Manhattan island. Previously deliveries of gasoline were in drums on stake trucks.

The fire department specifications call, among other provisions, for the unloading of trucks entirely by syphoning. They vary in this and in many other material features from the tentative specifications for tank trucks put out by a sub-committee of the Inflammable Liquids Committee of the National Fire Protection Association early in February and sent to the oil industry for criticism. (These specifications were published on page 29, Feb. 18 issue of National Petroleum News.)

Among other features, described in full in the New York Specifications published herewith, these specifications provide for 1500 gallons maximum capacity of trucks, with 250 gallons maximum capacity of one compartment. Only one kind of oil is to be carried in the truck at one time.

Additional Safety Features

Additional safety features in the delivery system called for in the specifications are a closing valve working automatically at a temperature of 160 Fahr., and another valve so installed and operating as to close automatically if a break occurs in the delivery system. A breather vent of not less than three-quarters inch is provided for each compartment closing by a plug fusing at 160 Fahr.

On grounding, the specifications provide for a grounding connection at the point of delivery before unloading starts and that this ground shall not be disconnected until the filling operation is complete. The specifications follow:

Specifications

Certificate of Approval:
A certificate of approval shall be obtained from the fire commissioner for each make or type of tank truck in which volatile inflammable oils are carried for delivery purposes and such certificate shall be granted only with respect to tank trucks whose reliability, safety and satisfactory performance have been demonstrated.

Truck Chassis:
The chassis shall be adequate to carry the superimposed tank together with its maximum load.

Marking and Painting:
Each tank truck used within the city limits shall be given a serial number and an approval number and shall be registered in the Bureau of Fire Prevention.

The name of the person, firm or corporation owning and operating the tank truck shall be painted on either side of the tank truck in letters not less than six inches high, also the serial number and certificate of approval number in letters not less than two inches high.

The words GASOLINE and DANGER shall be painted on either side and on the rear of the tank truck in letters not less than 10 inches high.

The tank body shall be painted red.

Use:
Tank trucks approved for hauling volatile inflammable oils shall be used for no other purpose; and shall carry only one type of such oils at any one time.

Tank Capacity:
The total carrying capacity of the tank shall not exceed 1500 gallons. Additional space for expansion shall be provided in each compartment equal to at least two per cent of the capacity thereof. An adequate sealed indicator shall be provided for each compartment in the fill cap dome.

Tank Construction:
The tank shall be a rigid all metal welded structure effectively braced to withstand twisting strains, elliptical in cross-section, and of not less than three-sixteenth inch steel throughout. If the total capacity of the tank shall exceed 250 gallons it shall be subdivided into two or more compartments no one of which shall exceed in capacity 250 gallons. The heads and partitions shall each be in one piece; shall extend beyond the shell and shall be connected so as to afford rigid construction. The wrapper sheet of each compartment shall be in one piece having the longitudinal seam located near the top and such sheet shall not be pierced at any point below the normal liquid level.

Each tank shall be capable of withstanding without structural injury a test of dropping while filled with water a distance of four feet and landing upon its mounting on a concrete floor.

For each compartment a manhole is to be provided having a minimum width of 14 inches and having a filler cap of not less than six inches diameter.

All welded joints in the tank and its connections shall have a strength in excess of the parts welded.

Each tank compartment shall be properly annealed to relieve any stresses introduced by the welding and shall be tested for strength and tightness.

The tank shall be so mounted on the chassis that it will not be subjected to twisting strains by the twisting of the chassis frame; also in such a manner as to eliminate shifting or twisting of the tank in its mountings and to eliminate friction between the tank and such mounting; and so as not to impair the flexibility of the chassis frame. No sillings and/or cradles of combustible material shall be employed in supporting the tank body.

The mechanism controlling discharge from the tank shall be at the rear and shall be housed in a control box integral with the tank body.

There shall be a single delivery outlet in which shall be placed a self-closing valve or a valve closing automatically when subjected to a temperature of 160° F.; such valve to operate in conjunction with an additional valve installed in such delivery assembly and opening against the flow of the liquid, and so placed that it will close automatically if a break occurs in the delivery assembly.

The discharge from the different compartments shall be carried to the control box and shall empty into the delivery outlet.

The discharge from the tank compartment shall be adequately housed within the tank (except, however, the high point of the syphon); shall be not less than two inches inside diameter; shall be welded into the partitions and rear head of the tank; and shall be free from threaded joints.

The outlet from the tank compartments into such discharge shall be controlled by valves situated at the outlet proper of each compartment. Such compartment outlet valves shall be operated selectively from the control box and such control shall not permit the opening of more than one compartment at a time. Such valves shall be capable in emergency of being closed manually either from the driver's seat or from the control box.

No valve shall be capable of being opened from the driver's cab.

Method of Discharge:
The compartments shall be emptied separately and discharged by means of a syphon only. The syphon action shall be established by hand operated pump of approved design and operation or by any other approved method.

There shall be a syphon breaker in the discharge line; said breaker to be open at all times except when compartment is discharging and to be operated and controlled in conjunction with the compartment outlet valve. The discharge hose shall be at all times connected to the delivery outlet.

All valves, discharge pipes, hose lines and connections shall be absolutely tight at all times and shall permit no leakage or spill therefrom.

Protection Against Fire:
Except for cushions on the driver's seat and on the window and windshield frames, the entire tank truck shall be constructed of incombustible materials. At least one three-quarter gallon foam type fire extinguisher shall be located in or near the driver's cab.

The outlet of the muffler or exhaust line shall terminate under the cab or engine and such outlet shall be turned down or forward.

The gasoline tank supplying the truck motor shall be made of material which, in strength and wearing qualities, is equal to 16-gauge galvanized iron. Such gasoline tank shall have adequate baffle plates and a filler cap hinged to the intake pipe or otherwise secured thereto.

Such tank shall be housed under the driver's seat within the cab and shall not be filled during the loading or unloading of the truck nor while the motor is operating.

The motor ignition system shall be so arranged that the motor cannot be started except by use of an ignition switch located within the driver's cab.

The truck shall be lighted from a storage battery which shall be used for no other purpose. Each lighting circuit shall be protected by a proper fuse and it shall be carried in a flexible metal conduit which shall be securely fastened to the truck. The tail light shall be located on top and at the extreme rear of the tank.

The tank shall be permanently grounded electrically to the chassis. The tank truck shall be electrically grounded before the tank filling operation is commenced and such grounding shall not be disconnected until this operation is completed. During the unloading operation a metal-lined flexible hose of approved make shall be used between the delivery outlet and the fill box. Such hose shall have a bronze or brass connection metallically and firmly grounded to the metal lining and shall be firmly connected to the fill box at all times during unloading.

A 40 x 40 mesh non-corrodable wire screen shall be installed under each filler cap. Such screen shall be adequately protected against injury and shall be so installed as to permit ready inspection.

Each tank compartment shall be provided with a breather vent of not less

than ¾-inch diameter. Such vent shall be protected by a 40 x 40 mesh non-corrodable wire screen installed so as to permit ready inspection. In addition a ¾ inch vent opening in each compartment shall be provided, normally closed by a plug fusing at 160° F. Such latter vent shall be protected by a similar screen and shall be so designed and installed as to insure positive operation. The mechanical parts of all vents shall be made of non-corrodable metal.

The syphon breaker opening shall be protected with a 40 x 40 mesh non-corrodable wire screen.

The control box door shall be fitted with heat responsive elements so that it will automatically close when subjected to a temperature of 160 degrees Fahrenheit.

Protection Against Collision:

The delivery outlet assembly shall be provided with a breakpoint at which the construction is weakened so that the break, if any, in the event of a collision will occur at the point so determined.

Fixed substantial steel bumpers shall be provided at the front and rear of the vehicle adequate to protect the discharge equipment. The material used shall be of dimension and strength equal to six inch structural steel channel weighing 10½ pounds per foot.

Protection Against Carelessness:

The propelling motor of the tank truck shall be stopped during loading and discharging.

The mechanism located in the control box at the rear of the truck shall be inaccessible while the propelling motor of the truck is in operation. Provision shall be made to require the stopping of the motor before the control box door can be opened and to require the closing of the control box door before starting the motor.

Driver's Cab, Side Racks, Running Boards, Etc.:

Side racks and buckets are prohibited. All steel running boards shall be provided and shall exceed the maximum width of the chassis at least three inches on either side. The over-all width of the assembled tank truck shall not exceed 96 inches. The front mud guard shall be carried to the maximum width established by the running board.

The driver's cab shall be provided with sliding half doors, arm high and with sliding folding windows without curtains.

An adequate windshield shall be provided in front of the driver's cab.

Proof of Compliance:

Satisfactory evidence of compliance with these regulations and of proper workmanship on all parts of tank construction shall, when required, be furnished to the fire commissioner.

Nordman Would Throw Spot Light on Gasoline Prices

MADISON, WIS., April 4

Believing that publicity is a great moral influence to keep prices right and eliminate discriminatory practices in the sale of gasoline, Edward Nordman, commissioner of markets in this state, has wished a rule on the oil industry making publicity obligatory. All oil jobbers will be obliged to keep a public record of business done from day to day, posting on the outside of service stations, and other places of sale, gasoline prices to all class of trade. In this endeavor he has the complete co-operation of the Wisconsin oil companies large and small.

The idea appears to be, not to regulate prices but to subject them to an enforced publicity and let the publicity regulate the prices. The rule is not currently in effect but it will be placed in force on May 1. Commissioner Nordman did not figuratively shove this ruling down the necks of the oil industry in his state. He literally "sold them on it."

The Commissioner called a special meeting in his office in Madison.

At the time appointed, a fair sized congregation assembled in Mr. Nordman's office. The Standard Oil Co. of Indiana was represented among other big marketers in Wisconsin. Many companies of small proportions were represented. The oil men were, however, not fighting the measure. They were for it. They wanted the word "gasoline" converted to "motor fuel" so as to let the ruling include kerosene as well as gasoline, but Mr. Nordman talked them out of it. They agreed to try the experiment on gasoline and include kerosene later perhaps.

Alvin C. Reis, attorney for the department of markets and H. L. Ekern state's attorney, held a sort of informal hearing with the oil men present; asked questions and made a record of the testimony. This added a little formality to the occasion and to the formal issuance of the departmental rule. Officials and oil men alike, believe that the rule will be comparatively easy to enforce, will lay every man's business principles open to the inspection of his competitors and customers and will have a salutory effect. The ruling follows:

STATE OF WISCONSIN
DEPARTMENT OF MARKETS

General Order No. 23
Madison, Wis., March 16, 1925.

Under authority of Sec. 99.14 (2), Wisconsin statutes it is hereby ordered:

Every jobber, retailer, or other dealer selling or delivering gasoline in this state shall keep a public record of the prices charged by him for each kind or kinds of gasoline to each and every class or classes of buyers.

Such record shall define specifically each class and shall show the prices and classes in effect on the taking effect of this order, and the day and hour of the taking effect of any new prices or changes in classes, and the terms of payment with cash or other price discounts, if any, and shall be kept on file until the expiration of the succeeding calendar year.

All sales and deliveries of gasoline shall be made in conformity with such record, and any sale or delivery not made in conformity with such record is declared to be an unfair method of competition and is prohibited.

This order shall not apply to or affect any gasoline actually delivered in carloads, nor shall it include sales of any gasoline to public authorities on sealed bids.

Every office, building, service station or other like place open to the public for the sale or delivery of gasoline shall have posted in a public and prominent place therein or thereon the following notice pertaining to sales or deliveries made at or from such place or station:

The prices and terms for the sale and delivery of gasoline by.....(Company) at this place are contained in a public record open to your inspection on request and such prices now in effect are:..... .....(Prices).

Each seller shall, on mailing any circular or statement of prices to a prospective buyer or to the public, mail a copy to the Commissioner of Markets, Madison, Wisconsin.

This order shall take effect (date to be inserted.)

Edward Nordman,
Commissioner of Markets.

Oil men who objected to have such a rule in force in the state but could not attend the meeting on April 3, were requested to submit their objections in writing. In collaboration with H. L. Ekern, attorney general of Wisconsin, Mr. Nordman issued this explanation of the purpose of the proposed rule which contains the following paragraphs:

"Secret discriminations in the prices charged for gasoline are an outstanding evil in the oil industry. These secret discriminations appear in several forms, such as the sale of gasoline to commercial customers at service stations at 2 cents below the price posted there and paid by the public at large, and the granting of special concessions in the form of rebates and discounts allowed only to favored customers. Such methods result inevitably in increased prices to the general public.

"With the object of checking these discriminations, an order requiring full publicity with regard to prices of gasoline was to be proposed at public hearing on April 3 at Madison before the commissioner of markets, under the unfair practices section of the marketing law.

"It is recognized that this deals with only a part of the entire problem, being merely a method of making the exact facts available alike to the public and to public officers who have to deal with the problem of securing fair treatment of consumers and of protecting competitors who use fair methods of competition. Questions of trust or monopoly practices must necessarily be dealt with separately, but it is felt that much of this will be eliminated if the business has to be done in broad daylight.

"The proposed order does not prohibit the granting of discounts in accordance with usual business practices, provided the facts are given to the public. The granting of special prices to any customer or class of customers without making that fact publicly known is declared an unfair method of competition.

"The proposed order requires that a permanent record be kept by each jobber, wholesaler or retailer of gasoline, showing the prices in effect at all times for each kind of gasoline, and, if different prices are allowed to different customers, this must also be shown. This is to be a public record, and the prices are required to be conspicuously posted for the use of the public.

"This proposed public record is someing more than that contained on the price signs usually displayed on service station pumps. It will show, not only the prices charged to the ordinary customer, but also the special prices if any, made to classes of customers.

"It is planned to keep the public informed through the press of the various changes in conditions of gasoline supplies and prices."

Oil Burner Association Changes Name And Employs Technologist

By Ward K. Halbert
N. P. N STAFF WRITER

CHICAGO, April 4

THE American Association of Oil Burner Manufacturers has voted to change its name and shorten it by two words. It is now called the American Oil Burner Association, effective since the first executive meeting of the new board of directors chosen last Thursday afternoon at the annual meeting in the Edgewater Beach Hotel, Chicago.

Among other important actions of the organization at its second annual convention April 1, 2 and 3, was the employment of a full-time technologist. The man chosen was J. T. B. Bowles, formerly identified with the Tidewater Oil Co. of New York. Leod D. Becker, editor of Fuel Oil, was chosen to succeed himself as secretary of the organization which he was instrumental in organizing.

The annual meeting, to which only voting members were admitted, resulted in the election of C. D. Chalmers of Minneapolis, president. Mr. Chalmers is head of the Chalmers Oil Burner Co., and with him were elected five regional vice presidents, all ex-officio directors, and five directors selected without respect to the region from which they come.

The vice presidents are John P. Leask, Peabody Engineering Corp., New York, for the east; E. J. Smith, Gill Manufacturing Co., Chicago, for the middle west; T. J. Voorheis, the Coen Co., San Francisco, for the west: Wallace C. Capen, Home Appliance Corp., St. Louis, for the south, and Lionel L. Jacobs, Fess Oil Burners, for Canada.

The directors are Edward P. Bailey, National Airoil Burner Co., Philadelphia, who is the retiring president; J. L. L. McCormack, Hardinge Burner Corp., Chicago; H. A. Tiffany, Tiffany Oil Burner Co., Paterson, N. J.; J. C. Johnson, the S. T. Johnson Co., Oakland, Cal., and George P. Kittle, Airoil Burner Co. Union Hill, N. J.

A Remarkable Meeting

Mr. Capen, the first president of the organization, was present throughout the meeting. He has seen it grow in two years from a handful of competitors, all doubtful about the outcome of their efforts, to an institution that is strong in money and in spirit. The first annual convention was held April 1, 2 and 3, in St. Louis last year, and that gathering was considered successful, but it was little to compare with this one. More than 500 men sat in some of the business sessions.

Addresses on the first day of the convention were of a general character, the more technical discussions purposely being postponed until later.

The retiring president's subject was "The Old Year and the New." He explained that the manufacturers of industrial burners had suffered during 1924 because fuel oil has to be sold in competition to soft coal, and coal has been so cheap over the year, that few industrial plants have been disposed to convert to a more expensive fuel.

The future, however, is full of promise, Mr. Bailey thinks.

"In spite of the remarkable efficiency and economy of the present-day domestic burner, it is true that the absolutely perfect and eventual domestic burner is yet to be evolved," he said, "for improvements and refinements are being made daily in burners. The exhibits at this convention show the rapid strides being made by the industry's well-known manufacturers. For this reason my advice to burner makers is not to expand too rapidly. Keep a safe cash reserve and do not be caught with insufficient funds to meet competition and avail yourself of new ideas and improved devices."

With regard to fire hazards Mr. Bailey stated that he was possessed of statistics showing that more residence fires were caused by hot ashes in wooden boxes than by all oil burner accidents, which brought a storm of applause.

A Code of Ethics

C. H. Chalmers whose duty it was to present a code of ethics for practice in the oil burner industry read a 15-minute paper amplifying the age-old principle of "Do unto others as you would have them do unto you" and applied it specifically to the burner business.

In the discussion of the code the advertising methods of the burner industry (at least certain parts of it) came in for a round scoring. Mr. Chalmers urged candor in discussions of one's own burner and not talking about a competitor's product any more than absolutely necessary. To this thought, James L. Breese Jr. of the Breese Engineering Corp., Chicago, added the suggestion that oil burner people abstain from their practice of talking about fuel specifications in their ads. He expressed the belief that great injury was done the business when several burner firms, each requiring a different oil for their burners, all tried to teach the public that their special oil was "fuel oil" and other kinds of fuel was not "fuel oil."

Lionel L. Jacobs, of Toronto, talked about "Oil Burning in Canada."

W. L. Huff, Honeywell Heat Specialties Co., of Wabash, Ind., delivered the report of the committee on specifications and nomenclature which precipitated quite a discussion of oil refining methods. First however, the committee's report urged that oil burners not be classified by their method of "feed" but their method of ventilation. It was deemed more expedient to have three classifications of burners, to wit; the "natural draft," the "forced draft" and the rotary draft." Gravity-feed burners may be found in more than one of these classifications, he explained, and classification by manner of feed is confusing.

Nomenclature to identify different kinds of fuel was suggested in four classifications; "kerosene" to mean kerosene and all distillates of about the same gravity as kerosene regardless of color; "furnace oil" to cover that range of light fuels between gas oil and kerosene, commonly spoken of in the oil trade as stove distillate; "domestic fuel oil" to embrace gas oil and such other heavier products as are usable in domestic installations; and "industrial fuel oil" to embrace all residual oils.

C. B. Dawes of the Pure Oil Co., took the floor to explain that the terminology of the refining industry was not specific in regard to different products. Their nomenclature varies in different refining centers, as also do the products from different refineries. His suggestion was that the committee get in communication with some representative refiners who would be glad to assist them in making their classification, and harmonizing their terminology.

Underwriters' Standards

J. H. Hirsch, chairman of the committee on underwriters' standards, recommended the closest co-operation with Underwriters' Laboratories, Inc., in its efforts to minimize fire hazards. "While a listing by Underwriters' Laboratories, Inc., does not cover but one phase of the burner manufacturer's responsibility to his customers, the work of the laboratory is of great help and importance to the industry and should be given encouragement and co-operation," he said. "The laboratory does not examine a burner with anything in view except its element of safety, nevertheless the element of safety is of primary importance to the burner manufacturer."

In connection with this report it was stated that the committee had joined in several meetings with the fire prevention committee of the American Pe-

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Underwriters Laboratories' Listing of Domestic Oil Burners

Complete to April 1, 1925

THE oil burners listed as standard on the following cards may be permitted for use when installed in accordance with the regulations of the National Board of Fire Underwriters for the class, if not in violation of any state law or local ordinance, and if company insuring property consents in writing on its policy. Before an equipment is installed or before an existing equipment is remodeled, the plans should be submitted for approval to the Inspection Department having jurisdiction.

Burners classified as domestic are suitable for use where an attendant is not constantly on the premises and are provided with anti-flooding devices for automatically shutting off the oil supply to the burner in the event of flooding or the extinguishment of the flame. Burners of this class are intended principally for heating dwellings, but where permitted, may be employed in industrial applications and for heating apartment houses and the like, where an attendant may or may not be constantly available. these devices, designated on the individual cards as having automatic temperature control, are electrically operated and regulated.

Electrical features which are a part of the equipments listed, have been reviewed. Installation of electrical equipment should be made in accordance with the requirements of the National Electrical Code.—Underwriters' Laboratories Bulletin.

"Arrow" Domestic Oil Burner. Socony Burner Corp., New York, N. Y.

Mechanical draft oil burner with a. c. electric motor drive. Temperature Control — Automatic. Ignition — Electric. Fuel—Kerosene or distillate of 35° to 45° Baume. Fuel Feed—From supply to float chamber by gravity or suction and from float chamber to combustion chamber by suction. Designed for hot-water, steam or hot-air installations.

Marking: "Arrow" on etched name plate attached to control housing.

Baker "Model F" Domestic Oil Burner. Baker Steam Motor Car & Mfg. Co., Inc., Pueblo, Colo.

Mechanical draft oil burner with a. c. electric motor drive. Temperature Control — Automatic. Ignition — Electric. Fuel—Kerosene or distillate not heavier than 38° Baume with flash point not higher than 160° F. Fuel Feed—Fom supply by suction to oil pump mounted on burner. Designed for hot-water, steam and hot-air installations.

Marking: "Model F" on name plate attached to blower housing.

Berryman "Type AL" Domestic Oil Burner. Berryman System of Oil Heating, Inc., Cicero, Ill.

Mechanical draft oil burner with a. c. or d. c. electric motor drive. Temperature Control—Automatic. Ignition—Gas pilot—Fuel—Gas oil not heavier than 32° Baume. Fuel Feed—From supply to standpipe by suction and from standpipe to combustion chamber by gravity. Designed for hot-water, steam and hot-air installations.

Marking: "Type AL" on etched name plate attached to burner base.

Caloroil "Type A" Domestic Burner. Caloroil Burner Corp., New York, N. Y.

Mechanical draft oil burner, steam atomizing type. Temperature Control—Manual. Ignition—Manual (gas heated steam generator for starting). Fuel—Kerosene or distillate of 36° to 40° Baume. Fuel Feed—From supply to float chamber by gravity and float chamber to burner by suction. Designed for hot-water, steam and hot-air installations.

Marking: "Caloroil Type A" on name plate attached to float tank cover.

Electrol "Type S" Domestic Oil Burner. Home Appliance Corp., St. Louis, Mo.

Mechanical draft oil burner with a. c. electric motor drive. Temperature Control — Automatic. Ignition — Electric Fuel—Kerosene or distillate of 36° to 40° Baume. Fuel Feed—From supply by suction to pump mounted on burner. Designed for hot-water, steam and hot-air installations.

Marking: "Type S" on name plate attached to blower housing.

Gilbert & Barker "Type HB-2" Domestic Oil Burner. Gilbert & Barker Mfg. Co., Springfield, Mass.

Mechanical draft oil burner with a. c. or d. c. electric motor drive. Temperature Control—Automatic. Ignition—Gas Pilot. Fuel—Distillate or gas oil not heavier than 30° Baume. Fuel Feed—To float chamber by gravity and from float chamber to combustion chamber by suction. Designed for hot-water, steam and hot-air installations.

Marking: "Type HB-2" on etched name plate attached to guard for drive shaft.

Gill "Type G" Domestic Oil Burner. Gill Manufacturing Co., Chicago, Ill.

Mechanical draft oil burner with a. c. electric motor drive. Temperature Control—Automatic. Ignition—Gas Pilot Fuel—Distillate not heavier than 36° Baume. Fuel Feed—From supply by suction to pump on burner cabinet. Fuel supply should in all cases be located below level of pump. Designed for steam and hot-water installations only (not for hot-air installations).

Marking "Type G" on name plate attached to cabinet.

Hardinge "Type U-L" Domestic Oil Burner. Hardinge Brothers, Inc., Chicago, Ill.

Mechanical draft oil burner with a. c. or d. c. electric motor drive. Temperature control—Automatic or manual. Ignition—Manual or gas pilot. Fuel—Gravity feed burner, distillate not heavier than 34° Baume. Pump feed burner, fuel oil not heavier than 28° Baume. Fuel Feed—Gravity from supply tank to combustion chamber; or suction from supply tank to pump; pressure from pump to combustion chamber. Designed for hot-water, steam and hot-air installations.

Marking: "Type U-L" on etched name plate attached to burner base.

Hart "Type C" Domestic Oil Burner. W. B. Wilde Co., Peoria, Ill.

Mechanical draft oil burner with a. c. electric motor drive. Temperature Control—Automatic. Ignition—Gas Pilot electrically ignited. Fuel—Distillate or gas oil not heaver than 30° Baume. Fuel Feed—From supply by suction to oil pump mounted on burner. Designed for hot-water, steam and hot-air installations.

Marking: "Type C" on name plate attached to main burner cover.

Inter-State "Type U" Domestic Oil Burner with "Type B" Oil Trap. Ro-City, Iowa.

Natural draft oil burner. Temperature Control — Manual. Ignition — Manual. Fuel—Kerosene or distillate not heavier than 38° Baume with flash point not less than 120° nor more than 180° F. Fuel Feed—Gravity. Designed for hot-water, steam and hot-air installations.

Marking: "Type U-No. 16-a" or "Type U-No. 10-a" on circular name plate attached to top of control valve housing.

Kleen Heet, "Types G, GJ and E" Domestic Oil Burners. Winslow Boiler & Engineering Co., Chicago, Ill.

Mechanical draft oil burner with a. c. or d. c. electric motor drive. Temperature Control—Automatic. Ignition—"Types G and GJ"—gas pilot; "Type E"—electric. Fuel—Kerosene, distillate or gas oil of 36° to 40° Baume with flash point not more than 190° F. Fuel Feed—"Type GJ" from supply, and "Types G and E" from vacuum tank, to automatic control valve chamber by gravity, and from control valve to combustion chamber by gravity. Designed for hot-water, steam and hot-air installations.

Marking: "Type G-No. 8, 13, 16, 19, 56 or 80," "Type GJ-No. 6, 10, 15 or 21," or "Type E-No. 14, 20, 50 or 75."

Lillibridge "Types 38D, 68D, 99D and 9-11D" Domestic Oil Burners. Lillibridge Heating Corp., Hutchinson, Kan.

Natural draft oil burner. Temperature Control—Manual. Ignition—Manual. Fuel—Kerosene or distillate not heavier than 36° Baume. Fuel Feed—Gravity. Designed for hot-water, steam and hot-air installations.

Marking: "Types 38D, 68D, 99D, or 9-11D" cast on burner and front plate.

May "Type L" Domestic Oil Burner. May Oil Burner Corp., Flushing, N. Y.

Mechanical draft oil burner with a. c. or d. c. electric motor drive. Temperature Control—Automatic. Ignition—Electric. Fuel—Distillate not heavier than 36° Baume. Fuel Feed—Suction from supply tank to oil pump, mounted on burner. Designed for hot-water, steam and hot-air installations.

Marking: "Type L" on etched name plate attached to blower housing.

"NoKol" Domestic Oil Burner. American NoKol Co., Chicago, Ill.

Mechanical draft oil burner with a. c. or d. c. electric motor drive. Temperature Control—Automatic. Ignition—Gas Pilot. Fuel—Kerosene or distillate not heavier than 36° Baume. Fuel Feed—From supply to float chamber by gravity, and from float chamber to combustion chamber by suction. Designed for hot-water, steam and hot-air installations.

Marking: "NoKol" on name plate attached to burner housing.

Oliver "No. 30A" Domestic Oil Burner. Oliver Oil Burner Corp., St. Louis, Mo.

Natural draft oil burner. Temperature Control — Manual. Ignition — Manual. Fuel—Kerosene or distillate not heavier than 38° Baume. Fuel Feed—Gravity. Designed for hot-water, steam and hot-air installations.

Marking: "No. 30A" last on manifold of burner and on name plate attached to anti-flooding device.

"Quinn" Domestic Oil Burner. Quinn Oil Burner Corp., Port Richmond, Staten Island, New York.

Natural draft oil burner. Temperature Control — Manual. Ignition — Manual. Fuel—Kerosene or distillate not heavier than 36° Baume. Fuel Feed—Gravity. Designed for hot-water, steam and hot-air installations.

Marking: "Quinn Oil Burner" cast on automatic shut-off.

Rotary "Type B" Domestic Oil Burner with "Type B" Oil Trap, Rotary Mfg. Co., Los Angeles, Calif.

Mechanical draft oil burner, water motor drive. Temperature Control—Manual. Ignition—Manual. Fuel—Fuel oil, gas oil or distillate with specific gravity of 28° to 40° Baume and flash point not less than 150° F. Fuel Feed—Gravity. Designed for hot-water, steam and hot-air installations.

Marking: "Type B" on burner casting, oil trap cover, and strainer fitting.

Wenger Company Moves

CHICAGO, April 4.—Wenger & Co. has moved its offices from 538 So. Clark St. to 624 So. Michigan Ave., telephone numbers are remaining unchanged, according to Henry E. Wenger, president.

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troleum Institute, and was working with that organization with mutual benefit.

Oil Man's Ideas

C. E. Dowd of the Lynch-Clarisy Oil Co., Chicago, on Thursday afternoon, clearly described the oil man's position in the oil fuel business. He told the burner men the ideas of the oil industry about installation of burners and domestic oil storage.

"The secret of the oil man's position is that he must make speed in deliveries," said Mr. Dowd. "The element of time is of the greatest importance to the man who supplies the fuel. By nature, the oil fuel business must be conducted on narrow margins. Still the oil man must have expensive equipment and fairly high-priced help. If he cannot serve his trade with speed he must charge more for his goods, and the customer who economizes on installation will sacrifice his saving, over and over again, in premiums paid on fuel.

"As the oil man in the gasoline business must be equipped to give service at the season of peak demand which comes in summer, so the oil fuel jobber must be prepared at all times to serve his trade at the season of peak consumption which comes at the coldest part of the winter. Eighty per cent of our gallonage is handled in about five months of the year. A $5,000 tank truck and competent driver cost about $3.50 an hour. Naturally, a few minutes lost on every truck, on every trip, for a whole winter, runs into the hundreds of dollars or the thousands of dollars, dependent upon the size of the fleet.

"My suggestion is," Mr. Dowd concluded, "to visit the plants of the men who supply your customers with oil. Burner men and their sales force should know something about the oil man's business; enough at least to be able to tell a prospective customer what he can depend upon from the oil industry.

"Encourage the customer at every new installation to have a tank big enough that he will not have to pay a premium for frequent small deliveries. Impress them with importance of having 2-inch fill pipes, so as to connect readily with the oil man's tank wagon outlet, and through which any oil will flow many times quicker than through a one-inch pipe. Try to put the customer's intake pipe close to the street, an alley or a strong driveway, because a heavy truck on a frail driveway will break it and cause dissatisfaction. The intake should not be farther than one hose-length from a point where the truck can come —or about two truck lengths."

Williams' Service School

G. C. Pledger followed Mr. Dowd. He is identified with the Williams Oil-O-Matic Heating Corp., and he told of the organization's success in training service men. Wherever the company has established an agency it has operated a school which ordinarily can dispose of a complete course by operating night and day for a business week. The idea is to teach salesmen, service men and others, to understand the machine they represent, and not only that but to set one in order whenever it ceases to run. The school is half class-room and half laboratory work.

E. J. Smith of Underwriters' Laboratories Inc., on Thursday afternoon told how Underwriters' Laboratories were brought into service to combat the growth of the fire loss. Since then the national annual fire loss has continued to grow, but the rate of its growth has been greatly diminished.

Closing his talk, Mr. Smith urged the burner men to join the National Fire Protection Association. "It is that organization, and especially the Inflammable Liquids Committee thereof, that has so much to say about the rules of safety which some burner men have considered too rigid," he said. "The best way to have a voice in the formation of these rules is for interested parties to join the association. Anybody who will give me his card will be equipped with an application blank by an early mail."

George W. Lee, Foamite-Childs Corp., Utica, N. Y., closed the second day of the convention with an address that caused more comment than any other talk of the week. The subject was "Answering the Coal Man's Propaganda" and to get right to the point of the address, his idea of an answer to the coal man's propaganda is a clean fire record. "One fire in an establishment where an oil burner is used, does the oil burner business more harm than all the knocks of all the disgruntled coal men in the town put together," he said.

Friday was a day of engineering talks. W. L. Huff discussed temperature and heat controls. E. George Moak, Automatic Burner Corp., Chicago, told the problems of sales management and how he solved some of the grave ones. Homer Linn, American Radiator Co., Chicago, went into the technicalities of adapting furnaces to oil fuel and making flues economize heat instead of waste it. And on Friday afternoon the engineering topics continued.

According to the original plan, "Tanks" was the general topic of the final afternoon of the meeting, but the session lingered until 6 o'clock and numerous other things were discussed. Edgar A. Bienenstok, Milwaukee Tank Works, Milwaukee, Wis., talked about galvanized tanks and their installation. In this address he told the advantages of galvanized tanks for buried jobs and also related interesting stories of the evolution of the tank his firm now puts out for oil burner and service station duty.

A. A. Butler, of the Graver Corp., East Chicago, Ind., took the platform immediately after the man from Milwaukee, and talked about black steel tanks and their installation. Without taking issue with the foregoing speaker upon points where the two kinds of merchandise differ, he related how good it was possible to make a black steel tank and how long they were known to endure under adverse conditions. One interesting point Mr. Butler brought out was the fact that his firm has never buried a tank under a basement floor in Chicago.

In every case, Mr. Butler pointed out, the domestic fuel installations made in Chicago have been tanks placed in the householder's coal bin. "That temperature is right in the basement" he said. "City ordinances permit the householder to have plenty of storage so installed, and usually he is not contemplating changing the floor plan of his basement to use the coal-bin space. It is only logical to install the oil tank where the coal used to be kept." In the course of his talk he emphasized the need of adequate vent lines in tanks, and impressed the desirability of cleaning up the customer's yard neatly after an installation is finished.

With the use of a slide projector, R. J. Anschicks, of the Protectoseal Co., Chicago, illustrated the use of certain safety appliances manufactured by his firm, and later went into a deep discussion of vents for oil tanks. Following Mr. Anschicks, an address on electric motors was delivered by L. E. Berry of the Jannette, Manufacturing Co., Chicago. He advised in favor of "Repulsion Type" motors for pumping service, and advised on how to effect silent running and satisfactory lubrication of electric equipment.

Jobbers Get in Early For Convention

CHICAGO, April 6.—Although the National Petroleum Marketers Association convention does not open here until tomorrow, over 50 oil jobbers registered today at the Congress Hotel for the annual spring industrial conference and all exhibition booths were ready for the show before 9 o'clock Monday night. Official registration for the meeting began Monday afternoon and the desk was busy until closing time.

Most early arrivals were members of the Independent Oil Men of America, assembled for an advance conference on the mutual advertising campaign. In a lively session Monday afternoon, President Nicholas presented tentative plans for nationally advertised brand of competitive grade gasoline to be sold by all members. Those present signed underwriters agreements financing advertising in national publications raising fund to $60,000 nearly half enough to float annual publicity campaign proposed for this year.

Massachusetts, Oregon and numerous states closer to Chicago are represented by jobbers present. South Dakota and Wisconsin have the largest delegations. Indications forecast most successful spring meeting of organization with all available rooms at the Congress and Blackstone spoken for already.

February Operations Increase Stocks by Six Million Barrels

WASHINGTON, April 6.

STOCKS of crude oil and refined products were increased by more than six million barrels as a result of February operations in the producing fields and refineries, according to the figures just put out by the Bureau of Mines.

Gasoline headed the list, the amount of this product run to storage during the month being 156,906,543 gallons. Stock of gasoline on Jan. 31 were 1,330,235,880 gallons. On Feb. 28 they were 1,487,142,423 gallons.

The daily average rate of gasoline production during February was the highest on record, 28,200,000 gallons, exceeding the January average daily rate by 1,400,000 gallons. Because of the fact, however, that February was a 28-day month and January a 31-day month, the total gasoline output for February was 41,000,000 gallons below the month's total for January.

While the refineries were turning gasoline out of their stills at the rate of 28,200,000 gallons a day, domestic requirements, as indicated by shipments from refineries, were only 19,370,000 gallons a day and export demand required 3,863,000 gallons a day more. This made a total demand per day of 23,233,000 gallons which, deducted from the daily average output, left apparently 4,967,000 gallons excess above the demand in January and 40 per cent above demand in February, 1924.

Stocks on hand at the end of February represented 77 days' supply of motor fuel at the February rate of consumption as compared with 100 days' supply on hand a year ago and 68 days' supply at the end of the preceding month. Export demand increased 15.3 per cent in February over January.

Kerosene production during February fell off about 33 million gallons from January production. However, combined domestic and export demand fell off still more with the result that about 40,000,000 gallons were added to stocks during the month.

Production of gas and fuel oils in February, a daily average of 37,000,000 gallons, was a slight increase over the January daily average and the combined domestic and export demand was below January with the result that stocks were added to by about 20,000,000 gallons.

Production of lubricating oils in February, as well as gasoline production, broke all previous records with a total for the month of 100,500,000 gallons or a daily average of 3,600,000 gallons. While domestic demand for lubricants increased 43 per cent, daily average, or about 535,714 gallons, export requirements fell off about 428,000 gallons a day with the result that stocks of lubes were increased by about 6,000,000 gallons during the month.

Production of wax during February totalled 48,000,000 pounds, a daily average of 1,700,000 pounds. This was a decrease of 50,000 pounds per day or 3 per cent from the output during the preceding month. Domestic demand remained steady at about 800,000 pounds a day. Exports during the month, however, fell off by 5,000,000 pounds and about 300,000 pounds were added to stocks.

Crude stock which on Jan. 31 stood at 391,232,854 barrels, on Feb. 28 totalled 392,016,715 barrels, this registering an increase of 783,000 barrels during the month.

During February the Bureau of Mines received reports from 293 operating refineries with an aggregate daily crude oil capacity of 2,417,697 barrels, running to stills a daily average of 1,892,601 barrels of both foreign and domestic crude oil, or 78.3 per cent of their daily operating capacity This represents an increase of 1.4 per cent over the refinery operations of the previous month, but a decrease of 2.3 per cent from the operations of February, 1924.

February crude runs totalled 52,992,819 barrels, of which all but 3,218,350 barrels was domestic crude oil. The daily average runs of 1,892,601 barrels was the highest ever recorded. Stocks of crude oil at the refineries totalled 43,670,175 barrels, including 4,966,254 barrels of foreign oil, an increase during the month of 400,000 barrels.

Comparative Analysis For February 1925

	Production	Imports*	Exports*	Stocks End of period	Domestic Demand
Gasoline					
Feb., 1924	683,736,103	5,609,928	103,546,045	1,383,889	402,703,876
Dec., 1924	795,613,195	14,708,629	101,398,308	1,179,503,185	662,588,987
Jan., 1925	831,652,370	14,447,766	98,961,932**	1,330,235,880	596,405,509**
Feb., 1925	790,441,679	12,033,151	103,141,310	1,487,142,423	542,426,977
Kerosene					
Feb., 1924	196,826,060	24,070	73,408,906	306,727,001	116,979,472
Dec., 1924	243,831,817	80,052	86,248,062	338,825,779	156,286,049
Jan., 1925	247,726,852	72,740	70,347,841**	378,598,381	137,679,149**
Feb., 1925	214,421,091	74,450	55,343,872	419,581,895	118,168,155
Gas and Fuel Oils					
Feb., 1924	1,025,421,651	59,830,201	112,994,698	1,491,173,016	952,628,476
Dec., 1924	1,199,093,235	46,189,123	111,988,496	1,670,508,938	1,103,874,893
Jan., 1925	1,171,402,042	44,246,327	103,091,940**	1,619,688,131	1,163,377,236**
Feb., 1925	1,058,724,840	59,554,524	109,457,541	1,639,105,022	989,404,932
Lubricants					
Feb., 1924	93,824,414	32,566	33,526,615	253,510,851	49,824,719
Dec., 1924	104,391,096	23,051	29,059,931	257,336,238	60,264,032
Jan., 1925	103,164,250	58,147	39,755,293**	268,699,396***	52,103,946**
Feb., 1925	100,502,790	32,270	26,949,884	275,258,365	67,026,207
Wax					
Feb., 1924	43,161,872	409,221	36,861,966	129,094,006	22,464,819
Dec. 1924	52,859,199	505,653	31,603,369	89,666,408	24,771,313
Jan. 1925	54,310,455	1,029,814	31,928,829	88,970,109	24,107,739
Feb. 1925	47,812,111	1,349,492	25,601,139	89,299,300	23,231,273
Crude Oil (a) (Barrels of 42 gallons)				(b)	
Feb., 1924	55,454,000	6,511,000	1,680,000	372,066,272	56,053,286
Dec., 1924	56,617,000	5,841,000	1,044,000	393,891,185	67,584,712
Jan., 1925	59,519,000	7,025,000	1,149,000	391,232,854	68,053,331
Feb., 1925	53,964,000	5,580,000	1,122,000	392,016,175	57,638,679

*From Bureau of Foreign and Domestic Commerce. Exports include shipments to Alaska, Hawaii and Porto Rico with exception of wax.
(a) From United States Geological Survey (revised figures used when available).
(b) Pipe line, tank farm, and refinery stocks.
**Revised to include shipments to Alaska, Hawaii, and Porto Rico.
***Revised due to addition of 229,950 gallons in inland Louisiana and Arkansas.

Prairie Shipments Show Gain in March

Staff Special

TULSA, April 4.—Shipments of the Prairie Pipe Line Co., which are reported monthly, showed their sixth consecutive increase during March, when they totalled 4,923,929 barrels, as compared with 4,322,556 barrels in February. This gain of 601,373 barrels is reduced somewhat by the fact that February was a short month. From the standpoint of daily average, a fairer comparison is obtainable. During March, daily average shipments were 158,836 barrels, a gain of 4459 barrels over February's daily average of 154,377 barrels.

Shipments of the Prairie Pipe Line Co. for the past six months have been as follows:

Month	Shipments	Daily Average
October, 1924	3,329,588	104,503
November	3,502,938	116,765
December	3,857,754	124,441
January, 1925	4,441,290	143,265
February	4,322,556	154,377
March	4,923,929	158,836

AMARILLO.—Max Bauer, geologist who for some time past has been representing the Mid-West Refining Co. in Montana, is now in charge of the local office of the Mid-West Exploration Co. recently opened here in the Gas building. Carl H. Wegeman and Vice-President Bretsnyder, of the Mid-West, recently made a trip through New Mexico and the Texas Panhandle.

CARLSBAD, N. M.—G. L. Ellis, geologist, who is making his headquarters here, is in charge of two wells being drilled in the Artesia field by Snowden & McSweeney, Tulsa operators

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Boston	Dayton	Montreal	Toledo
Bridgeport	Detroit	Newark	Toronto
Buffalo			Tulsa

Tubular Goods Buying is Mostly in Small Orders

PITTSBURGH, April 7

By Special Correspondent

SMALL orders continue the rule in the tubular products market, oil country jobbers sending in specifications for from one to five carloads at a time generally. Occasionally an order for 10 carloads or so comes in but these are rare. Just now no large line pipe installations are up for consideration, although there is projected a gas line for bringing natural gas from the Louisiana fields up to Memphis, Tenn. Since this involves about 200 miles and the pipe will start in size at 18 or 20-inch, a large tonnage is involved.

The Hope Natural Gas Co., Charleston, W. Va., is completing plans for the construction of a 100-mile pipe line, including booster stations. The Pomeroy Bend Gas Co., on March 30 contracted for the drilling of 15 new wells in the Meigs county, Ohio, field where seven wells are now producing gas and oil.

Export of casing and oil line pipe in February this year totaling 6574 tons, registered quite a drop from February a year ago when 9225 tons were exported. In the eight months ended Feb. 28, 1925, 43,242 tons were shipped abroad as against 58,168 tons in the same period ended Feb. 28, 1924. Pipe prices are firm on the same basis where they have been for two years past.

Plate prices are less firm, although nothing below 2.00 cents a pound Pittsburgh has developed. The usual figure is 2.10 cents with 2.00 cents being made in competitive territories. The Standard Oil Co. of Indiana will build 32 stills in its own shops at Whiting, Ind., but 1150 tons of plates will be bought from a nearby mill. The Standard Oil Co. of New Jersey ordered 15 tank cars for export from the American Car & Foundry Co. The General Petroleum Co. awarded 500 tons of steel to an eastern mill for tanks which it will fabricate itself. The Associated Oil Co. of California inquires for two 80,000-barrel tanks, involving 600 tons of plates.

Pittsburgh fabricators report occasional tank inquiries involving up to 2000 tons of plates at a time.

Department of commerce date shows that in February, 3321 net tons of oil storage tanks were made as against 4314 in January; 1125 net tons of refinery tanks is February as against 1165 in January and 4238 net tons of tank cars in February as against 1285 in January. Other figures compiled by that department show that in February this year 413,823 steel barrels were made against 426,127 in January: 407,781 shipped as compared with 415,040 in January and that on Feb. 28 there were 64,402 in stock and the unfilled orders involved 1,336,124 or more than twice as much as on Feb. 28, 1924—608,660.

The General Petroleum Corp., Los Angeles, placed 242 tons of steel channels for a building with an eastern mill.

In tin plate makers are going along on backlogs with nothing much in the way of new business developing. The Nippon Oil Co., of Japan, however, is expected to inquire shortly for its usual 50,000 base bases.

The Pierce Petroleum Corp., 111 Broadway, New York City, is preparing plans for large extensions and improvements to its plant at Texas City, Tex.

The Phillips Petroleum Co., Wichita Falls, Tex., has purchased the holdings of the Macon Oil & Gas Co., in Wilmott oil field and plans the erection of a natural gasoline plant. Engine compressors and miscellaneous plant equipment will be needed. F. E. Rice, First National Bank building, Bartlesville, Okla., is general superintendent of the gasoline department.

The Marland Refining Co., Ponca City, Okla., is about to construct a 2-story and basement addition, 60 x 115 feet at its oil works there to cost $100,000 with equipment. A portion of the new building will be utilized as a laboratory.

The Transcontinental Oil Co., Benedum-Trees building, Pittsburgh, operating oil refineries and oil well properties, is disposing of a $4,000,000-note issue. A portion of the proceeds are to be used for equipment and extensions with improvements. F. B. Parriott is president.

The Sinclair Refining Co., 45 Nassau st., New York, recently took over 15 acres at Portsmouth, Va., and is contemplating the construction of a storage and distributing plant. It will cost $100,000 with equipment.

The Pan-American Oil Co., Los Angeles, will erect an oil storage and distributing plant at Cotton, Cal. It will involve $80,000 with equipment.

Plans are being considered by the Bradford Supply Co., Main st., Bradford, Pa., oil well supply people, for a 1-story machine shop at Eldred, Pa. It will cost $25,000 with equipment. R. A. Mackie is general manager.

The Tokheim Oil Tank & Pump Co., Fort Wayne, Ind., awarded the general contract for a 1-story addition to its plant, 80 x 195 feet costing $32,000 to Olds Bros., First National Bank building, Fort Wayne.

If You Know the Taylor Pasture You Can Spot This Well

OSBORNE, KANS., April 4.—We can imagine the lion lying down with the lamb, especially if the former is not very hungry and the latter is fast on his feet. By putting a further strain on our imagination, we can conjure up the picture of a ball player shaking hands with the umpire who has just called him out on strikes; and, by using a factor of safety of 2, and stretching said imagination to its utmost elastic limit, we can visualize in our mind's eye the picture of a well being drilled without using any Mail Pouch.

All those, however, are but child's play as compared with the stern test to which we are now put, to wit: we are asked to imagine a well being located, in perfect amity and accord, through the collaboration, and with the unanimous agreement, of a geologist, a clergyman, and a doodlebug operator! This is beyond the power of any ordinary, run-of-mine imagination, and on the face of it, seems impossible, but we saw it in the Osborne newspaper, and it must be so.

Let's read it—"The contracts for the drilling of the wells were let through the influence of Hal. W. Neisanger, who fixed the location for the test with his oil finding machine. The geologist for the Shenandoah Oil Co. confirmed the finding so the machine, and the location is very satisfactory to all parties concerned. These findings were also concurred in by Rev. J. A. McClellan, our local geologist and oil enthusiast." The story goes on to say that the oil finding machine has informed this triumvirate of science, religion, and clairvoyance that three oil-bearing sands will be encountered, one at 500 feet, one and 950 feet and a deep sand at 2600 feet.

For the benefit of those scouts who possibly have not been able to get the definite location of this well, we will quote further from the story "The test is located a half mile east and a half north of the cemetery, and a mile and a half north of the court house, in the northest corner of the Taylor pasture. The drilling is being done by the Shenandoah Oil Co., of Coffeyville and Independence."

Roll on, Shenandoah. You can't go wrong when so many authorities are agreed that you have picked the right spot.

500-Barrel Well in Cross Cut Field

DE LEON, TEX., April 7.—Edward R. Wilson, president of the De Leon Pipe Line & Refining Corp. brought in a 500 barrel well on his Gafford lease in the Cross Cut field. Pay was found at 1230 feet. Well was drilled only seven feet in the sand and no doubt when drilled deeper will show considerable increase.

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Tests Show Cutting of Crude Loss Possible by Using Proper Tank Paint

CLEVELAND, April 3

LOSS by evaporation of crude in storage and how to cut it down, is one of the most important problems facing the oil producer and one to which, in the past three or four years particularly, he has given a good deal of thought. It is pretty well recognized that where no attention is paid to tank roofs and so on, the loss of light vapors into the air mounts to enormous figures every year.

Oil producers generally in the last couple of years have done a great amount of effective work toward cutting down this evaporation loss and they have been helped very greatly by the engineers of equipment companies who have designed gas tight roofs of various types, floating roofs, water cooled roofs and insulated roofs, suiting them to the needs of the producer with big storage tanks in the field.

But while the producers have been more and more sold on the value of gas tight roofs, thief hole covers, hatch covers, proper venting devices and so on, and are replacing old leaky wooden roofs with the gas tight steel roofs to a larger and larger extent, it is a question if one very important phase of the evaporation loss prevention problem has not been more or less overlooked. That is, the question of choosing the paint for tanks that will refract the heat of the sun instead of absorbing it and transmitting it to the contents of the tank.

Perhaps the selling talks put out by the manufacturers of gas tight roofs and fittings have tended to raise the belief in the producers' minds that when they had equipped their tanks with such roofs and fittings they had done all that was possible in the way of reducing evaporation losses. But they haven't by a long shot.

Keeping Down Temperature

Of course, the gas tight roof goes a long way toward eliminating evaporation loss by limiting it to the amount needed to equalize pressure in the tank. But it should be borne in mind that the amount of breathing the tank must do is governed by the temperature of the crude. For instance, if the tank is kept cool, the expansion of the liquid is minimized, hence there is less vapor breathed out to reduce the pressure and hence less evaporation loss.

Choosing the right kind of paint is an important factor in keeping the oil cool and hence in cutting down the evaporation loss. This point is emphasized in Serial No. 2677, Reports of Investigations, recently compiled by Ludwig Schmidt, associate petroleum engineer of the Bureau of Mines and put out by the Bureau.

And preventing actual loss by volume of crude through evaporation is not the only thing to be considered. Evaporation invariably takes out the lightest and therefore most valuable fractions and that means reducing the gravity of the oil. Evaporation losses of the light fractions from a quantity of crude in storage over several months may mean a loss of 10 cents or even more a barrel in the market price of the oil through a reduction in its gravity.

Mr. Schmidt has made an exhaustive study of the problems of evaporation loss from every angle. In his report he does not minimize the importance of gas tight tankage. In fact he shows the vast savings it accomplishes, but he then goes into the question of paint as a means of reducing the loss still further.

Probably the most important tests made by Mr Schmidt and covered in the report was one made over a year on four 55,000 barrel tanks out on the lease and filled with Burbank crude. These tanks were subject to the same conditions that prevail on leases everywhere in the Mid-Continent. The result of this test, as covered in Mr. Schmidt's report, showed that evaporation loss is considerably less from tanks covered with aluminum paint than from tanks painted with other colors. As to the relative durability of the paints, Mr. Schmidt states that the condition of the various paints used on the four tanks was about the same at the end of the year's test.

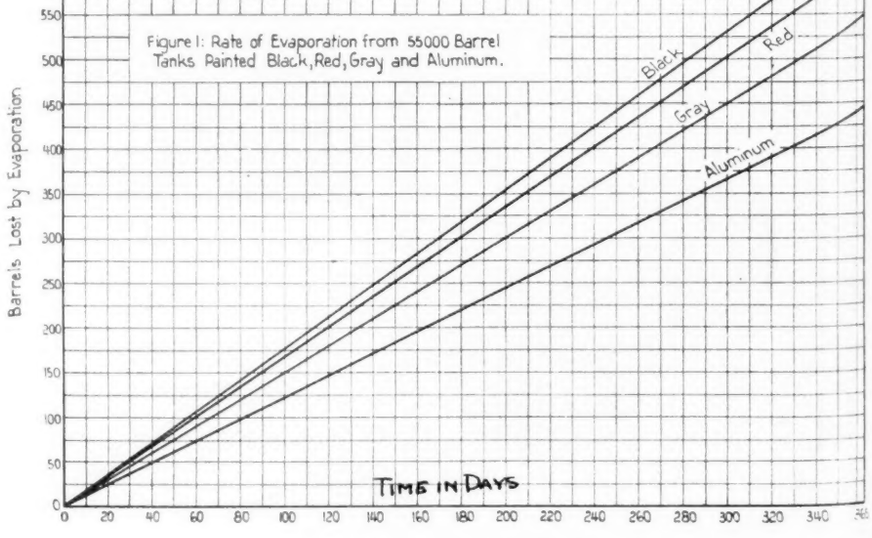
Some weeks before Mr. Schmidt's report came out, the Pure Oil Co., after thorough tests and observations by its engineers, came to the conclusion that aluminum paint was the most efficient in reducing evaporation loss from tanks and adopted it as the standard paint for crude, refinery and bulk station tankage throughout its organization.

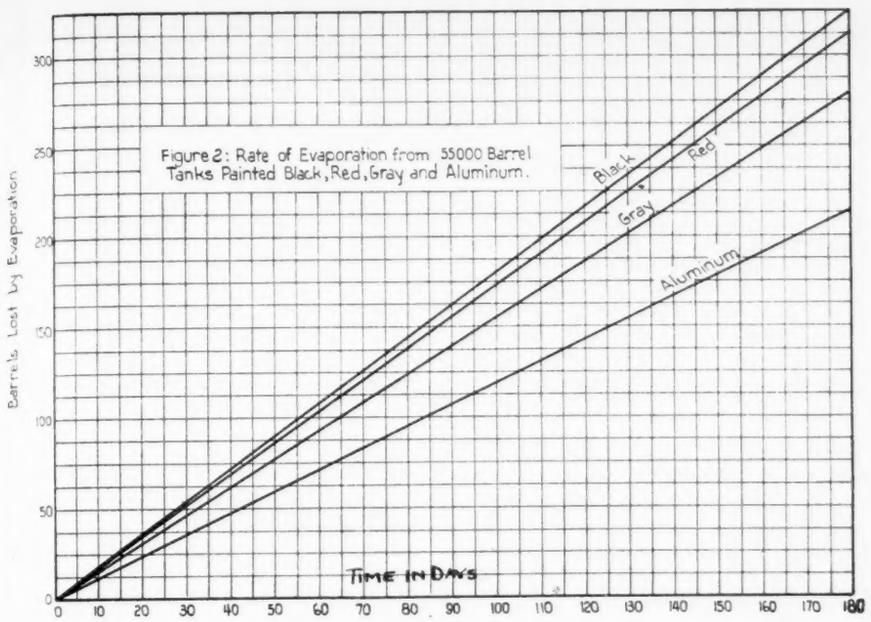
But Mr. Schmidt in his report did not minimize the importance of having gas-tight tankage. The right paint is not to be considered as taking the place of making the tanks tight in the first place. It is significant that Mr. Schmidt picked four gas tight tanks for his tests. His report follows:

"Investigations conducted by the Bureau of Mines pertaining to the reduction of evaporation losses of petroleum have shown that such losses may be reduced 70 to 80 per cent by the use of vapor-tight tanks equipped with vacuum and pressure relief valves, and vapor-tight thief hatches. Additional studies have shown that it is often economical to supplement this type of construction with other measures that will reduce evaporation losses still further. Water cooling systems, insulation, and light colored paints are the measures most often used in connection with vapor-tight tanks.

"Painting with light colored paints probably is employed in the greater number of cases. On account of the cost of insulation, or of installing water-cooling systems, the use of these methods are restricted to tanks containing gasoline or crude petroleum with a very large content of low boiling fractions.

"In choosing paints for tanks many factors must be considered. Probably the three most important are cost, protective value, and color. Many companies have adopted a standard color for all of their tanks. In this way they reduce the initial cost of paint by buying in large quantities. The tank farms of such





companies usually have a neat appearance, resulting from the uniform painting of all tanks. This procedure also has advertising value. Unfortunately, most of the paints used to protect steel are of the darker colors, usually red or black. These colors accelerate the rate of evaporation. Several companies have solved this difficulty by using a dark colored metal-protective paint as a primer coat, and a paint of any desired color for the final coat. Special metal protective primers to be used under light colored cover coats have been placed on the market by several paint manufacturing companies.

"The temperature of oil in storage tanks is influenced largely by heat received from outside sources by radiation. The main source is the sun.

"Before considering the effect of color on the temperature of the oil and vapor in a tank, some of the characteristics of radiant heat will be discussed briefly. Radiant heat waves are similar to light waves in that they are reflected, absorbed and refracted. Therefore, when radiant waves fall on a body, one portion is reflected, another portion is absorbed and, if the body or matter is very thin or transparent, a part is transmitted. The nature and color of a body determines the extent to which it is heated by the absorption of radiant waves.

"Many laboratory tests have been made in order to determine the effect of color upon the absorption and reflection of radiant waves. The results of a test by Gardner[1] are shown in Table 1."

[1]Gardner, H. A., The Heat Reflecting Properties of Colors Applied to Oil and Gas Storage Tanks: Circular 44, Paint Manufacturing Association U. S., 1917.

Table 1.—Rise in temperature of benzine contained in small tanks painted in various colors (gloss finish), when subjected to rays of a carbon arc for a period of 15 minutes.

Color	Rise in Temp. Degrees F.
Tin plate	19.8
Aluminum paint	20.5
White paint	22.5
Light cream paint	23.0
Light pink paint	23.7
Light blue paint	24.3
Light gray paint	26.3
Light green paint	26.6
Red oxide iron paint	29.7
Dark Prussian blue paint	36.7
Dark chrome green paint	39.9
Black paint	54.0

(Editor's Note—While the heat from a carbon arc on tanks in the laboratory would not necessarily be the same as that of the sun shining on a tank outdoors, the proportionate results would be the same. That is, the paint that showed up the best under the carbon arc test would in the same proportion show up best under ordinary conditions of a tank standing in the sun.)

"Table 2 shows the results of another test by Gardner[2] on small tanks of different colors filled two-thirds full with naphtha and exposed to the sun for two hours.

[2]Gardner, H. A., Paints or Light-Oil Storage Tanks and a Note on Spray Equipment: Circular 131, Paint Manufacturing Association U. S., 1921.

Table 2.—Rise in temperature and percentage loss by volatilization in small tanks filled two-thirds full with naphtha and exposed to the sun for two hours.

Color of Tank	Temp. of Naphtha Degrees F.	Loss of Naphtha by Volatilization Per cent
Black	111	9
Bright red	109	8
Dark red	108	8
Dark green	108	8
Battleship gray	106	6
Tan	104	5
Red primer — White top coat	102	5
Cream	102	5
Pale blue	102	5
White	100	4

"These laboratory tests indicate that the color an oil storage tank is painted probably has a material influence on the rate of evaporation.

Breathing Losses With Vapor-tight Equipment

"Since the value of vapor-tight tanks, properly equipped, is well known to the oil industry, it is unnecessary to discuss that phase of tank construction here. Even with vapor-tight tanks, however, there are material evaporation losses due to the 'breathing' of the tank. The 'breathing' of a tank is caused by the 'sucking' in, or expelling of air from the vapor space above the liquid owing to the variation of atmospheric conditions. The amount of gasoline vapor in the air-vapor mixture expelled from a tank depends upon the vapor pressure of the oil. There are several factors that influence the breathing of a tank, and the amount of gasoline vapor in the air vapor mixture, but the most important is probably temperature.

Comparative Tests on Four 55,000 Barrel Storage Tanks

"The laboratory tests which have been published in the past indicate the desirability of painting storage tanks, for gasoline and crude oil of high gasoline content, with a light color. However, these tests do not show the actual saving that may be accomplished by the use of light-colored paints, as the tests have been made on small tanks, which are more rapidly affected by the sun's heat than the larger tanks. Furthermore, the tests do not cover long periods of time.

"In order to make this comparative test cover as wide a range of colors as possible, with the facilities available, four 55,000 barrel tanks were painted black, red, battleship gray, and aluminum, respectively. Black, red and battleship gray are colors much used in the oil industry. Aluminum was selected because it gave the most satisfactory results in the laboratory tests as shown in Table 1.

"The tanks used in this test were each of 55,000 barrels capacity. The roofs were of wood covered with 22-gage galvanized-iron sheets crimped to form vertical joints one way and flat seams at

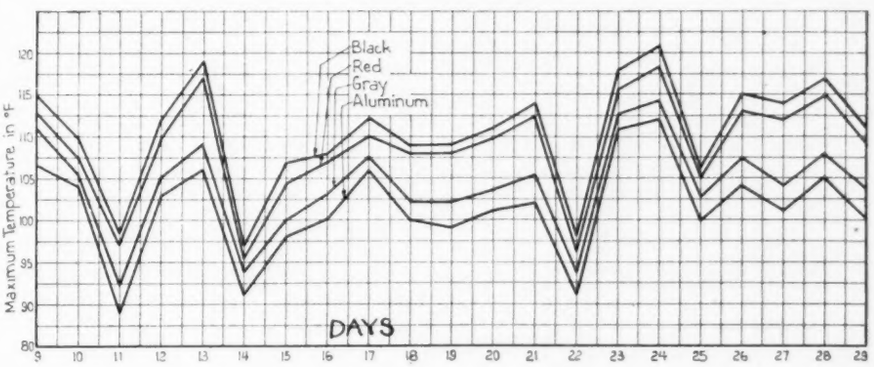


Figure 3—Maximum temperatures recorded during 20 days in August on the black, gray, red and aluminum tanks

right angles. All seams were riveted and soldered. The roof was bolted to the top angle, using a lead gasket to make a gas-tight joint. The bolt spacing was about two and one-half inches, center to center.

"Each tank roof was equipped with four gage hatches and a 6-inch breather line, the latter extending outside of the fire dike and protected with fire screens. Each hatch consisted of an eight-inch flange securely bolted to the roof, and fitted with a plug.

"Every effort was made to keep these tanks vapor-tight throughout the duration of the test. Before the initial gage was made each tank was inspected and every leak calked. At regular intervals inspections were made and seam leaks that had developed were calked.

"The last coat of paint was applied after the tanks were filled with oil. The roof of each tank was painted at that time.

Crude Oil Used

"The tanks were filled with fresh Burbank crude pumped directly from vapor-tight lease stock tanks. In no case did the oil go through any intermediate gathering station tanks. The average gravity of the crude used was 37.4° A. P. I., and had an average gasoline and naphtha content of 29 per cent, by the Bureau of Mines, Hempel method.

Discussion of Test

"The comparative tests were started in January, 1924, and extended until January of the next year. The results of the tests, therefore, apply to average conditions throughout the year. Samples of the oil were taken monthly, and the tanks were gaged at similar intervals. Throughout the summer and fall months recording thermometers were used on each tank to record the vapor temperatures. Temperatures of the oil were also observed at regular intervals.

"Figure 1 shows the average rate of evaporation loss from each tank over a period of one year.

"Figure 2 shows the average rate of evaporation loss from each tank over a six-month period including the summer months.

"Table 3 gives a summary of the results of this test.

"A comparison of the two charts shows that the total losses for the year from the black, red and gray tanks were less than twice the total losses for the six-month period. The reason is that the six-month period included the hottest months of the year. In the case of the aluminum tank the total losses for the year were more than twice the total losses for the six-month period as the evaporation loss amounted to 1.19 barrels per day during the summer months and as compared to an average loss of 1.22 barrels per day for the year. The discrepancy is due to the fact that the roof and part of the side of this tank were covered with oil when a lead line on a nearby flow tank broke. The oil was not cleaned off completely for several weeks. Therefore the tank was almost black during a part of the test.

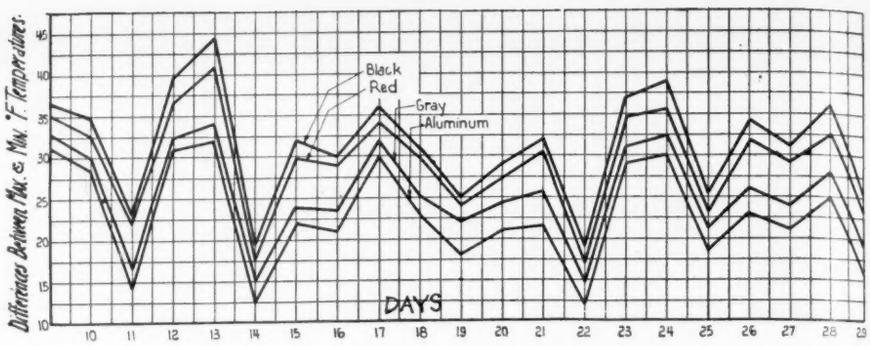


Figure 4—Daily differences in maximum and minimum temperatures recorded during 20 days in August on tanks painted black, gray, red and aluminum

"Figure 3 shows the recorded maximum daily vapor temperature for a period of three weeks during August. This period was selected because it most nearly illustrates average temperature condition during the summer months of this test. Figure 4 shows the daily difference between the maximum and minimum vapor temperatures recorded for the same period. Unfortunately these charts do not show the comparative vapor temperatures that would be recorded on tanks situated in a tank farm or refinery removed from producing fields. The red, gray and aluminum tanks were located on leases that were being developed in the Burbank field.

"Therefore, during the hot summer months the tanks were coated with a thin film of dust. The dust was usually oily due to the large quantities of gas and oil vapor in the air and clung to the tank tenaciously. This condition had a tendency to reduce the heat reflecting properties of the colors and to place all of the tanks in the same class as to color. The effect of the dust was greatest on the gray and aluminum tanks. The dust was readily washed off by rains so it did not materially affect the results when the entire period of test is considered.

Summary

"A test as conducted on four tanks painted black, red, gray, and aluminum. The results of the test clearly show the value of light-colored paints for tanks containing gasoline or crude oil of high gasoline content. These results are believed to be conservative, and under slightly different conditions, the differences between the results obtained with the light and dark colored paints would doubtless be more marked.

"Although this test was not conducted primarily to determine the lasting qualities of the various tank paints, an inspection of the paint was made after the test and, as far as the writer could determine, the paints on all of the tanks were in about the same condition. This point is of material importance to the operator, for many consider that light paints do not have the wearing qualities of dark tank paints.

"These tests indicate that the saving with the light paint, approximating 200 barrels per year per 55,000-barrel tank, would warrant giving the tank one color coat every year if necessary. In fact the writer has been informed by several refiners that it is customary for them to give each of their gasoline tanks one color coat every spring, and that the saving in evaporation more than pays for the additional cost. The writer has noted several instances where light-colored paints have held up for several years without losing the original color.

* * * * * * *

Table 3—Results of comparative evaporation tests on four 55,000 barrel crude oil storage tanks, painted black, red, gray and aluminum, respectively.

Color of tank	Initial gage barrels	Evaporation Loss in one year Barrels	Evaporation Loss in one year Per cent	Loss in gravity in one year °A. P. I.
Black	52058	649	1.24	.6°
Red	53294	609	1.14	.5
Gray	53192	547	.99	.3
Aluminum	53418	447	.83	.2

Acknowledgements

This investigation was conducted under the direction of the Bureau of Mines with the co-operation of the State of Oklahoma.

William T. Dacon of the St. Louis Surfacer & Paint Co. helped the writer materially by furnishing the paint used in these tests.

The Phillips Petroleum Co. actively co-operated in the field work by furnishing tanks, oil and labor for painting.

R. A. Cattell, superintendent, F. W. Lane, petroleum chemist, and H. C. Fowler, associate petroleum engineer of the Bartlesville station of the Bureau of Mines, assisted in the preparation of the report with valuable suggestions and criticisms. Miss Ruth Brown, draftsman of the Bartlesville station, prepared the drawings. I. N. Beall, H. M. Thorne and John Devine made the distillations and gravity determination.—Reports of Investigations, Department of the Interior, Bureau of Mines.

TULSA.—Harry H. Smith, secretary of the Mid-Continent Oil & Gas association has gone to Chicago on a business trip of several days' duration.

Deep Sand at Garber May Be Important Find of Year in Oklahoma

By A. F. Hinton
N. P. N. STAFF WRITER

TULSA, April 4

THE past week has seen a development which may furnish at least part of the answer as to where Oklahoma's new oil is to come from during the rest of this year, and which probably will force us to lay on the shelf for another year the much-used phrase "nothing in sight" in the way of new fields or new flush production.

This development is the discovery by the Sinclair Oil & Gas Co. of a new deep sand in the Garber field, Kay county, a field noted for its multiplicity of sands, but heretofore occurring at depths down to about 2300 feet. The new well is in a sand found at 4377 feet. Coming almost to a day on the anniversary of the discovery of the Tonkawa deep sand, and at a depth not very far away from that at which the Tonkawa sand was found, the discovery has all the earmarks of having opened up a source of a large amount of flush, high-gravity production.

The well, known as No. 25 Belveal, and located in the NEc of 24-22-4W, is flowing about 30 barrels an hour of 44 degrees gravity crude, after having been drilled to total depth of 4381 feet, or four feet in the pay sand. It was making between 20 and 25 barrels an hour when the sand had just been touched, the deepening apparently not having caused much increase in output. It is probable, however, that further drilling, which is to be undertaken when all pipe line and tankage connections have been made, will develop a considerably larger well.

Although this is an important discovery, and one that will bring about a great deal of deepening and new drilling in the vicinity, its status depends considerably upon the identity of the formation from which the oil is flowing. It was at first reported as being in the Wilcox sand, comparable with the sand found at a slightly lesser depth at Tonkawa, and now generally conceded to be the Wilcox. Other reports were to the effect that it was below the Wilcox, and was in the Turkey Mountain sand, which is supposed to be the sand producing in the so-called second pay in the Tonkawa deep wells.

It is most probable, however, that the well has not reached the Wilcox horizon at all, but is rather in what would approximate the Bartlesville sand, in about the same horizon as that productive at Burbank and in the Rainbow Bend field, Kansas, and probably in other districts of northern Oklahoma. There has not been sufficient time since the well came for accurate correlations to be made; neither a log of the well, nor samples of its formations have been generally available as yet. However, it is believed by geologists of the Sinclair company that stratigraphically the producing sand is above the Mississippi lime, about 100 feet below the base of the Oswego, and is probably in the Cherokee shale series.

Although the Oswego was not identified as such, a lime penetrated from 4100 to 4330 feet is believed to have been that formation. While apparently too high in the Cherokee for the Bartlesville sand as known farther east in Oklahoma, it seems reasonable to assume that relationships between the Bartlesville and other formations are not necessarily the same as in other localities and that that prolific and long-lived sand is giving up the oil in the new well. If such is the case, the well is several hundred feet above the Wilcox.

Characteristics of the Bartlesville, as compared with the Wilcox and Turkey Mountain formations, are such that more importance is attached to a discovery in the former than in the two latter horizons. Greater area may be expected of the Bartlesville than of the Wilcox, and also more stable and more sustained production, a much longer life and greater ultimate recovery. Development of a Bartlesville sand field, therefore, probably would have a greater and more lasting effect on Oklahoma's production than would one in the flashier and more erratic Wilcox or Turkey Mountain.

The Tonkawa deep sand, although covering an area larger than other Wilcox pools, and conforming more nearly in outline with upper producing horizons than is usually the case, is giving an example of typical Wilcox production performance after the "flush" period has ended. Out of 91 wells completed—wells, by the way, which gave up 18 million barrels of oil in less than a year's time—about 40 are now dead, having declined very rapidly and finally ceased to produce altogether. When only 25 of these wells had been completed, they were making about 88,000 barrels daily, as compared with about 56,000 barrels at present from the 51 that are still producing.

Is New Well

The new Sinclair well is not an old well drilled deeper, but was started "from the top" and was drilled with rotary tools at 3315 feet. After drilling one foot with cable tools, the well had its first oil showing below the regular Garber sand series, yielding about 50 barrels a day on the swab at this point. This showing was finally passed up and the well was taken on down. At 4182 feet another oil showing was had, and at 4269 some gas was found in a limey sand.

From this point on down, there was 100 feet of oil in the hole from 4182 to 4188 feet in sandy lime. At 4204 feet, oil rose in the hole to 2000 feet from sandy gray lime. At 4208 feet the well was in sandy gray lime and swabbed 32 barrels that day. At 4210 feet it 50 barrels in a day. The 6-inch casing was set at 4170 feet. At 4215, there

(Continued on page 43)

Drilling Operations in Oklahoma, Kansas and N. Texas

	April 4 — Week Ended — Mar. 28									
	Loc.	Rigs	Drg.	S.D.	Total	Loc.	Rigs	Drg.	S.D.	Total
OKLAHOMA										
Burbank	8	10	48	...	66	...	2	46	00	56
Other Osage	13	15	72	12	112	17	16	69	14	116
Bristow-Cushing	10	36	122	31	199	15	35	108	35	193
North Oklahoma	6	19	94	53	172	7	18	91	58	174
South Oklahoma	8	12	124	49	193	7	14	120	52	193
Muskogee	...	11	39	19	69	...	17	32	17	66
Okmulgee-Bristow	3	63	135	30	231	5	65	148	31	249
Tonkawa	...	3	36	9	48	...	3	38	11	52
Wewoka-Cromwell	18	26	244	33	321	19	28	240	34	330
Total Oklahoma	66	195	914	236	1411	70	198	902	252	1421
Kansas	73	84	332	129	618	76	92	302	147	617
NORTH TEXAS										
Eastland County	...	...	26	5	31	...	...	19	5	24
Stephens County	...	16	37	27	80	...	19	37	26	82
Texas Panhandle	...	15	29	11	55	...	13	33	10	56
Mexia District	...	25	29	8	62	...	22	34	13	69
E. Texas Wildcats	...	6	9	26	41	...	6	9	26	41
W. Texas Wildcats	...	41	116	79	236	...	30	116	74	220
Wichita Falls	...	99	176	51	326	...	99	179	46	324
Total N. Texas	...	202	422	207	831	...	189	427	200	816
GRAND TOTAL	139	481	1668	572	2860	140	479	1630	599	2854

Completions in Oklahoma and Kansas Week Ended April 4

OKLAHOMA

Carter County

Company	Well No.	Location	Depth	Initial Production
Humble	2	C NW NW NE 33-1S-3W	2888–2892 OWD	225
Page	6	C SE SE NW 27-2-3W	2632–3382	15M
Merrick et al	1	C SE SW NE 8-3-2W	2342–2426	84
Amerada	5	CNL S½ NE SW 28-5-1E	1106–1112	145

Creek County

Alvard-West	1-A	SEc NW SE 14-17-8E	2260–2296	90
Lima	3	NW NW NW 24-17-8E	2749–2753 OWD	18M
Bu-Vi-Bar	2	C SE SW 18-17-9E	2715–2746	6½M
Bu-Vi-Bar	3	C NW SW 18-17-9E	2653–2688	18M
Wolfe	2	CWL SE NE 6-16-9E	2756–2775	15
Billingslea et al	2	CNL SE SW 30-15-9E	3037–3046	912
Shaffer	2	C NE NE 6-14-9E	1260–1275	15M
Billingslea	2	SEc NE NE 28-14-9E	3125–3168	35
Joemack	1	NEc NE SW 4-14-10E	3191–3198	40
Cosden	1	NWc SW SE 4-14-10E	3165–3198	105
Donnelly et al	1	NEc 19-14-10	2869–2932	150
Wilcox	6	C SW NE NE 20-14-10E	3340–3369	120
Prairie	4	SWc NW SE 17-15N-8E	3788–3838	35
Bennett et al	6	NEc SW NE 14-18-11E	T.D.2315	Dry
Wrightsman	1	SWc SW NE 33-17-10	T.D.3040	Dry
Ireland et al	1	SEc SW SW 4-17-11E	T.D.2567	Dry
Slater et al	1	NEc SE SE 1-16-9E	T.D.2250	Dry
Skelly	1	SEc SE SE 21-14-9E	T.D.3146	Dry

Garfield County

Crews Heirs	17	CWL SE 19-22-3W	1982–2010	50

Garvin County

T. P. C. & O.	2	CNL SW NE NW 17-1N-3W	1565–1597	50
Magnolia	3	C NE SE 16-1N-3W	T.D.2460 OWD	Dry

Grady County

Okla. Natl	2	SEc NE SE NW 23-5N-8W	T.D.2478	15M
Hagerling et al	2	C NE NE NW 35-5N-8W	T.D.2059	Dry

Hughes County—Papoose

T. B. Slick et al	7	C NE SW NW 2-9N-9E	3315–3334	300
Slick et al	8	C NW SW NW 2-9-9	3313–3330	45
Slick et al	9	C SW SW NW 2-9-9	3307–3317	100
Slick-Gypsy	4	C SW SW NE 3-9-9	3295–3320	400
Cosden	3	C SW SE NW 3-9-9	T.D.3312	Dry
Magnolia	3	NEc NW SE 18-9-9	T.D.3520	Dry

Hughes County

Roxana	1	C NE NE SW 12-8-8E	T.D.3512	Dry
Magnolia	1	C NW SE SW 4-9-11E	3047–3055	74

Hughes County—Wewoka

Dixie	1	C NE NW NE 6-7-8E	3200–3209	1286

Jefferson County

Counell	1	SEc NE 31-4S-8W	T.D.3082	Dry

Kay County—Braman

Comar	4	SWc NW SE 21-29N-1W	1915–1928	165
Comar	2	SEc SW NE 21-29-1W	2098–2108	112

Kay County

Vernon	1	C SE NE SE 20-29-1E	765–770	2½M
Marland	1	SEc NE NE 27-27N-3E	T.D. 385	Dry

Kay County—Tonkawa

Wentz	50	C NW SE SW 34-25-1W	4274–4292	4750
Carter	11	C SW SW NW 35-25-1W	T.D.4700	Dry
Carter	12	C SE SW NW 35-25-1W	T.D.4365	Dry

Muskogee County

Voegler	7	CNL S½ NE SW 19-14-16E	1615–1642	28
H. L. Jolly	6	C SE NE NE 2-14-18E	1157–1171	15
H. L. Jolly	6	CEL NE NE 33-15-18E	T.D.1105	Dry

Noble County

Davenport	1	CSL SE SE 20-24-1W	T.D.2012	Dry
Braden Bros	1	SEc NW NW SE 7-22-1W	T.D.1002	Dry

Okfuskee County

Windsor	1	NEc SE SW 22-11N-11E	2550–2561	235

Okfuskee County—Papoose

Cosden	1	C NE NE NE 21-10N-9E	3290–3312	55M
Midwest-Gulf	1	SEc NE SW 33-10-9	3342–3351	180
Carter	6	C SW SW SE 33-10-9	3082–3086	631
Slick	2	NWc SW SE 35-10-9	3317–3334	1283
Slick	6	C SE SE SE 35-10-9	3347–3364	225, 15M
Slick	8	C NE SW SE 35-10-9	3349–3369	500
Slick	1	C SW SW NE 35-10-9	T.D.3376	Dry

Okmulgee County

Sheldon-Superior	2	NWc NE NE SW 34-16-12E	2152–2181	100
Clover-Neely	1	SEc NE NE 4-15N-11E	1996–2042	80
Kellough et al	2	CSL SW SE 29-15-11E	2475–2523	45
Eastern	3	NWc NE 32-15-11E	2516–2528	75
Eastern	9	CNL NW NE 32-15-11E	2514–2525	30
Olean	2	SWc NW SE SE 11-15-12E	2128–2168	40
Caskey et al	1	SWc NE 4-11-12E	1502–1542	3M
Swindler	1	NEc SW SE 21-15-14E	2177–2183 OWD	634
Berry	3	NEc NW SW 34-16N-12E	T.D.2300	Dry
Georgia	2	CNL SE SE 22-13-11E	T.D.1200	Dry
Eagle Picher	4	CEL NE NW 33-13-12	T.D.2454	Dry
Independent	1	NWc NE NW 33-13-12E	T.D.2180	Dry
Misener	3	CEL NE SE 28-15N-14E	T.D.2238 OWD	Dry

Osage County

S. S. Home	2	SE NE SE SW 32-20N-11E	2465–2474	10
Gillespie et al	24	C NW NE NE 8-20N-12E	1945–2013	15
Winona	19	SW NE 9-20-12E	1930–1989	30
Howard et al	7	NW NE NW NW 15-21-12E	1300–3150	10
Sterling	3	SEc 16-21-12E	1347–1382	30
Barnsdall	25	NE SW NE NE 21-21-12E	1879–1915	100
Gillespie et al	14	SW NW SW SE 31-21-12E	2035–2097	5
Sinclair	20	SE NE SE 32-22-10E	1758–1838	50
Skelly et al	16	CWL SW 34-22-12E	1220–2156	15
Peters et al	3	NW SW 4-23-9E	2098–2146 OWD	5,1M
Barnsdall	1	SW SE SW SW 2-24-11E	1665–1737	10
Foster-Davis	9	SE SW NE 17-25-9E	1847–1931	200
Owen-Osage	286	C SE SW SE 10-27-10E	1980–3000	3
Owen Osage	316	SW SE 8-27-11E	1893–1906	1¼M
Beacon	8	CWL E½ W½ SE 27-29-11E	968–1017	30
Breene et al	6	SE NW SE SW 14-21-10E	T.D.2630	Dry
Red Bank	6	NE SE NE NW 29-23-8E	T.D.2560	Dry
Oswego	1	NE SE 6-28-12E	T.D. 835	Dry

Osage—Burbank

Carter	1	NEc 20-26-6E	2910–2972	580
Phillips	14	C NW NE SW 12-27-5E	2975–3036	600

Pawnee County

Magnolia	2	NEc NW SE 5-22N-3E	T.D.4181	Dry
Burton	6	NW SE NE 25-20-7E	2529–2567	20
Thomas et al	1	SWc NE 25-20-9E	1943–1963	30
Holmes et al	1	NWc SE SE 28-20-9E	2720–2723	230

Pontotoc County

Lloyd-Smith	1	NEc NW SE NE 6-3N-7E	1196–1227	20

Seminole County—Cromwell

Cosden-Phillips	1	C SE NE SW 33-11-8E	3322–3420	60, 25M
Continental	2	C SE SW SE 33-11-8E	3318–3408	80, 40M
Continental	3	C NE SW SE 33-11-8E	3295–3379	50, 30M
Sinclair-Gardner	6	C NE SW SW 34-11-8	3366–3416	1360
McMan-Magnolia	1	C SW SE SW 34-11-8	3348–3392	645
Sinclair	7	C NW NE NE 4-10-8E	3360–3418	350, 8M
Sinclair	2	C NE NE SE 5-10-8E	3434–3476	360
Cosden	2	C SE NE NE 17-10-8	T.D.3550	Dry

Seminole County

Independent	1	SEc NW SW 13-9-7E	T.D.4040	Dry

Stephens County

Smith-Law	4	NWc NE NE 31-1N-8W	2111–2114	50
Fisher-Brannon	3	SEc NE SE NW 22-1S-8W	1998–2018 OWD	60
Magnolia	14	SEc NE SW NE 33-1-8W	2470–2479	19

Tulsa County—Vern-Bruner

Echo	2	NWc NE SW 5-19-12E	2075–2096	35
S. S. Home	5	SWc NW 5-19-12	2080–2092	30
S. S. Home	6	SEc SW NW 5-19-12	1993–1997	35
Munn et al	1	SEc SW SW 20-19-12	2100–2162	125
Posey Short	1	NEc SE 23-19-12E	1528–1539	9

Tulsa County

Deens-Stevens	1	SWc NE 24-19-14E	1160–1167	3½M
Upp-Vick	4	NWc SW SE 9-18-13E	1208–1235	15
Center	3	CNL SW NW 33-18-14E	1500–1545	10
Sheldon	1	NWc SW 31-17-13E	T.D.2345	Dry

Wagoner County

W. A. Dodd	5	NEc SW SE 14-17-16E	1317–1321	2M
Lyons	1	NWc NE SE 18-17-16	991–1004	5M
Pennington	1	SWc NE SW 29-18-15E	T.D.1298	Dry
Lumpkins	3	NWc NE NW SW 26-18-16E	T.D. 585	Dry

KANSAS

Butler County

Allen et al	2	C SW SW 7-26-5E	T.D.2027	Dry

Chase County

Phillips	1	NWc SW 1-22-8E	T.D.3150	Dry

Chautauqua County

Glidden	1	NWc SW NE 16-32-13E	T.D.1806	Dry
Buck-Schuler et al	1	SWc SE 3-35-8E	T.D.2640	Dry
Victor Martin	1	NWc NE 4-34-13E	1832–1852	3½M

Cowley County—Graham

Marland	2	SEc NE NE 9-33-3E	2558–2564	153
Marland	4	NWc NE NE 9-33-3E	3521–3523	50
Marland	2	SWc NW NW 10-33-3E	2560–2567	200

Cowley County

Ind. Terr. Ill	1	SWc NE 3-32-4E	T.D.3503	Dry
White Eagle	1	NWc NE NW 25-32-4E	T.D.3515	Dry
Marland-Alcorn	1	SWc NE 32-33-3E	T.D.3868	Dry

Elk County

Pennok	2	NEc SW SW 30-30-10E	1166–1174	50
Gillespie	1	NWc 7-31-11E	1085–1105	2M
Pennok	3	SWc 30-30-10E	T.D.1910	Dry
Curtis et al	1	SEc 30-30-13E	T.D.1902	Dry
Shaffer	1	NEc NW SW SE 33-30-13E	T.D.1765	Dry
Crawford et al	1	NEc SE 5-31-11E	T.D.1930	Dry
Southwestern	1	C N½ SE 33-31-12E	T.D.1719	Dry

Greenwood County

Gillespie	8	SWc SE NE 19-22-10E	2291–2341	600
Empire	14	SWc NE SE 16-23-9E	2369–2424	75
Great Southern	4	CWL SW 32-23-10E	2293–2333	80
Skelly	1	SEc NW 4-23-13E	1645–1656	10
Rhodes-Able	1	SEc NE 16-23-13E	1633–1645	20
Mid-Kansas	7	CSL N½ SE 19-25-19E	2393–2446	150
Prairie	10	CWL NE SW 14-24-9E	2095–2189	208
Riverly et al	2	SEc SW NE 2-23-9E	T.D.2485	Dry
Rogers	6	SEc NW SW 18-23-10E	T.D.2235	Dry
Cross	1	NWc SW 28-24-13E	T.D.1642	Dry

Lincoln County

Berry et al	1	C NW 31-12-10W	T.D.3528	Dry

Montgomery County

Hancock Drlg	1	CNL SE SW 35-32-16E	T.D.1250	Dry
Harwood-Hazlett	1	CEL Lots 3 and 4 7-33-17E	T.D.1403	Dry

Riley County

Empire	1	SWc NE 14-9-4E	T.D.2600	Dry

Russell County

Derby et al	1	SWc NE SW 5-12-15W	2754–2759	400
Valerius	4	SWc NE SW 8-12-15W	2935–2939	250
Skelly	1	NEc 18-12-15W	2936–2950	100

Wilson County

Gwinnup et al	1	NWc SE 2-28-13E	T.D.1750	Dry
Glidden	1	C NW 27-30-15E	T.D.1710	Dry

(Continued from page 41)

was 2000 feet of oil in the hole, in sandy lime. At 4221, broken sandy lime, and on down to 4250 feet. From 4269 to 4275, sandy lime, and soft sandy lime from 4345 to 4360 feet. The 5-inch casing was set at 4344 feet. The top of the pay sand was found at 4377 feet, and the well started flowing when this sand had just been scratched. The well has been drilling nearly eight months, but this cannot be taken as a criterion as to the time that will be required by subsequent wells, as it was pioneering ahead, and drilling cautiously at all times.

Sinclair Has 5000 Acres

Although the Sinclair Oil & Gas Co., with its subsidiary, the Exchange Oil Co., controls about 5000 acres out of approximately 6000 acres comprising the present outlines of the field, several other companies have acreage there, the Roxana Petroleum Corp. and Cosden Oil & Gas Co. having leases offsetting the new well. Unless the deep pay area extends beyond the field's present limits, therefore, it seems likely that no wild drilling campaign will follow the discovery, as the three large companies probably will agree upon a conservative development policy, with Sinclair in a position to dictate drilling over most of the field.

The Garber field has produced about 15 million barrels of crude since its discovery in 1916, and has a daily average production at present of about 5000 barrels. Garber crude is of the highest gravity found in the Mid-Continent field, except in isolated wells, averaging 47 degrees, and has always commanded a premium. It will be noted that the crude from the new well is somewhat lower in gravity than the average for the field, as it is reported to be about 44 degrees. This is plenty high enough, however, to rank as a strictly high-grade crude, with a wonderful refining value.

Current Production

Oklahoma recorded another increase in production the past week, although at a much slower rate than during the preceding week, going up 2535 barrels to an estimated daily average of 454,615 barrels. Its gain during the previous week was about 6800 barrels. This week, considerable increases at Burbank and Cromwell were cut about in half by losses sustained at Papoose and Tonkawa.

Cromwell, where developments are proceeding merrily in the north end, and where the field apparently is to be indefinitely extended, reported 312 wells, a gain of 12 over the week, and gained 4860 barrels in production, averaging 36,800 barrels daily. Burbank, which also embarked on a temporary upward movement, now has 1697 wells, a gain of six over the preceding week, and went up 2260 barrels to a daily average of 59,360 barrels. The Osage county side is making about 47,600 barrels from 1502 wells, the remainder coming from 195 wells in the Kay county extension.

Papoose reported two new wells, for a new total of 139, and decreased 2775 barrels in production, averaging 26,335 barrels daily. Tonkawa added one well, making 755 in all, and fell off 2400 barrels, recording a daily average of 75,800 barrels. Of this amount, the 92 deep wells are making about 56,800 barrels daily. Wewoka, with 116 wells, a gain of two, held almost even over the week, increasing its production only 90 barrels to 11,250 barrels daily. South Weleetka, with 25 wells, the same as last week, averaged 1850 barrels daily, a loss of 130 barrels.

Stroud had 70 wells, the same as the previous week, and its daily average production of 3235 barrels was about 50 barrels greater than in the week before. The Yeager field, near Holdenville, which so far consists of the lone Dixie Oil Co. well, made 478 barrels a day during the week.

Development of the north end of Cromwell is resulting in big wells coming in with high initial and bringing back memories of early days of the field. Farthest north production yet developed in the field is that of Gypsy Oil Co., on its Jackson lease where three wells are making 6400 barrels daily. This company's No. 2 in S.E. corner S.W. N.E. of 33-11-8 is the best of the three, now making 165 barrels hourly in sand from 3367 to 3402 feet. It made as high as 200 barrels an hour when first drilled in. No. 1 on this lease in S.W. corner S.W. N.E. is making 1420 barrels, and No. 3, located between the other two, is making 2140 barrels daily.

Waite Phillips and Cosden No. 1 Brown in N.E. corner S.W. of 33-11-8, a S.W. diagonal offset to Gypsy No. 1 Jackson is making 10,000,000 feet of gas and spraying some oil at total depth of 3376 feet. In Davenport field, Lincoln county, producing area of field was extended a half mile S.E. when Texas Co. drilled in its No. 1 Oleson, N.W. corner S.W. S.W. 2-14-5. This well got top of sand at 3310 feet and has been drilled to 3367 feet. Its initial production was about 700 barrels daily, but it has since declined to 210 barrels. Preparations are now being made to give it a shot. The oil is of 47 degrees gravity.

Wentz Oil Corp. apparently has a failure in its test in the center N.E. S.E. of 17-33-3 east, Cowley county, Kan., which was looked upon as a possible connecting link between the Rainbow bend and the Graham pools. This well had a good body of sand from 3168 to 3203 feet and made as high as 17,000,000 feet of gas from an upper sand at 3117 but at last reports had drilled through the sand and was showing for only a twenty barrel well. The gas flow had been mudded off in drilling down to the expected oil pay.

In Oklahoma in the past week 120 wells were completed of which 75 were oil wells, 13 were gas wells and 32 were dry holes. This compared with last week's figures of 79 completions divided 46 oil wells, 12 gas wells and 21 dry holes. Oil wells included in this week's report had total initial production of 18,675 barrels, giving them an average per well of 249 barrels. Last week 46 wells brought in 8439 barrels of new production with a per well average of 205.2 barrels.

Completions reported from Kansas this week totaled 37, of which 14 were oil wells, two were gas wells and 21 were dry holes. Last week there were 20 Kansas completions equally divided between oil wells and dry holes. The 14 oil wells reported this week had totaled initial of 2341 barrels with an average of 167.2 barrels per well. Last week 10 wells brought in 1691 barrels of new production, giving them a per well average of 169.1 barrels.

Mabank Tests Drilling in Austin Chalk

HOUSTON, April 6.—Three tests in the Mabank area about 30 miles northeast of Powell will indicate within a week whether one of them is to be the "discovery" well of a new Woodbine fault pool. All are drilling below 2550 feet.

Penn et al in western Henderson county topped the Austin chalk marker formation at 2723 feet and was drilling in broken formation at 2765 feet. This test was possibly drilling in the fault plane period. The Murchison & Fain test seven-eights of a mile east of the Penn, was drilling in chalk at 2228 feet. In southeastern Kaufman county the Duff test of Murchison and Fain was still in chalk at 2815 feet.

The Robert R. Penn et al test on the Murphy tract, in the northwest corner of the James M. Gardner survey, failed to get the Austin chalk marker formation at 2425 feet, which was its drilling depth April 1. Surface elevation of this test is 322.89 feet.

About seven-eighths of a mile east of the Penn hole, the Cranfill, Murchison & Fain test on the J. W. Springer lease had the top of the chalk at 2228 feet. This marker formation was believed to have its normal thickness of about 400 feet at the point where the Springer test was going ahead in chalk at 2376 feet. Surface elevation is 308.64 feet.

Northeast of these tests about five miles, in Kaufman county, the Murchison & Fain operation on the O. P. Duff farm, Gregario Ybarbo survey, topped the chalk at 2420 feet. Surface elevation is 330 feet.

CARLSBAD, N. M.—Among petroleum geologists now making their headquarters in this city are V. E. Cottingham, of the Roxana Petroleum Corp., Oscar Hatcher, Gypsy Oil Co., and W. B. Emery, Ohio Oil Co. General Superintendent McFadden of the latter company, also is here temporarily.

Peddie Leaves Humble to Enter Sales Work

Staff Special

HOUSTON, April 2.—W. J. Peddie, recently of the Humble Oil & Refining Co.'s purchasing department, has become identified with the Maintenance Engineering Corp., 614 Second National Bank Bldg., serving that organization as president. The Maintenance Engineering Corp. is sales agent for the Halyburton valves manufactured by the American Car & Foundry Co; forged steel flanges manufactured by the Philadelphia Steel & Iron Co.; and, also, jobbers handling Edwards forged steel valves and forged steel fittings.

Before leaving the Humble, Mr. Peddie worked under John A. Rowe, purchasing agent for the refining department. He had been connected with the stores and purchasing departments of that company since 1919 and has a host of friends who wish him well in his new connections.

TULSA.—Dr. J. E. Pogue, consulting engineer and petroleum economist of New York, is spending several days in Tulsa. As usual along about this time of the year, he is trying to find out what is the matter with the oil business.

Gulf Coastal Texas Completions, Week Ended April 4

Company	Lease—Well	Field	Depth	Prod.
Oxford Oil Co	Harrison 3	South Dayton	3500	2300
Peer Oil Co	Harrison 2	South Dayton	3600	2800
Vacuum Oil Co	Barrett 4	South Dayton	3350	Aband.
Gulf Production Co	Beaumont Pet. Co. 30	Goose Creek	3000	250
Gulf Production Co	H. Busch 2	Goose Creek	3150	Aband.
Gulf Production Co	Bassett Blakely "C" 10	Blue Ridge	3100	200
Kishi Development Co	McGuire 5	Orange	3375	500
Atlantic Oil Producing Co	Moore 3	Orange	3350	120
Humble Oil & Refining Co	Winfree 11	Orange	4675	20
Gulf Production Co	Gladys 213	Spindle Top	850	200
Rio Bravo Oil Co	Bryan 3	Saratoga		300
				18% B.S. and W
Buchanan et al	Milholm 82	Batson	725	10
Gulf Production Co	Davis 17	Big Creek	3950	Aband.

Completions in North Louisiana and Arkansas, Week Ended April 2

LOUISIANA
Cotton Valley

Company	Well	Location	Depth	Yield
Alabama Pet. Co	Coffee No. 1	19–21– 9	2525	150
Humble O. & R. Co	Bodcaw No. B-17	28–21–10	2585	50
Ohio Oil Co	Bodcaw No. 22	27–21–10	2550	130
Ohio Oil Co	Bodcaw No. 24	28–21–10	2570	150
Webster Parish—Spring Hill				
Texas Oil Co	Lewis No. 1	25–23–10	2775	12 m. ft. gas
Caddo Parish				
Ohio Oil Co	Lynn No. 5	12–21–15	3015	junk. aband.
Caddo Parish—Waskom				
A. C. Scott et al	Stringfellow No. 1	19–17–16	1865	10 m. ft. gas
Waskom—Harrison County				
Braswell et al	Gordon No. 1	Adams HRS	1950	12 m. ft. gas
John Woodley et al	C. M. Abney No. 1	J. O. Shandoin HRS	2000	30 m. ft. gas

TEXAS
Panola County

Company	Well	Location	Depth	Yield
Magnolia Pet. Co	J. Lawless No. 1	J. E. Myrick HRS	1950	5 m. ft. gas

ARKANSAS
Nevada County

Company	Well	Location	Depth	Yield
Ames et al	Womack No. 2	10–14–21	1105	150
Smitherman-McDonald	Womack No. 3	10–14–21	2990	dry aband.
Smackover				
Gulf Refining Co	L. Werner S. M. Co. No. A-12	26–15–17	2310	100
Eberhart et al	Gibson No. 1	27–15–17	2350	30
Kelly et al	Wells No. 1	23–15–17	2305	35
Riggs Drilling Co	Hildreth No. 1	22–15–17	2360	s. w. aband.
Umstead et al	Jones No. 1	26–14–17	3030	dry aband.
White et al	Riley No. 1	23–15–17	2395	dry aband
Natural Gas & Pet. Co	Murphy No. 6	8–16–15	2476	5000
Forrest Oil Co	Cramer No. 16	22–15–16	2255	150
Texas Oil Co	Solmson No. B-6	32–15–16	2256	40
Texas Oil Co	Solmson No. B-7	32–15–16	2257	30
J. W. Clark	Alphin No. 3	19–16–15	2070	s. w. aband.
Federal Pet. Co	Childs No. 3	8–16–16	2650	75
Humble O. & R. Co	Pate No. 5	10–16–15	2385	1000
Lion O. & R. Co	Flenniken No. 5	10–16–15	2445	150
Pure Oil Co	Bilyew No. 1	8–16–15	2370	1000
Roxana Pet. Co	Flenniken No. A-1	8–16–15	2380	100
Unity Pet. Co	Roper No. 6	3–16–15	2365	junk. aband.

Completions in North-Central Texas, Week Ended April 4

Archer County

Company	Well No. Farm	Location Survey-Sec.	Depth	Init. Prod.
Atlantic	1-Parrish	H. & T. C. 26	1562–1566	100
W. Phillips	7-Wilson	Harrits	1541–1542	115
Gulf	11-Oil Inv.	Harris 125	1201–1203	100
Christie Bros	2-Richardson	S. A. R. 10	1291–1314	160
White Bros	7-Kunkle	Hardaway	1136–1152	250
County Line	5-Stampffi	T. E. & L. 2408	1351–1372	62
Fisher et al	3-Rogers	T. E. L. 2407	1325–1344	65
Green et al	2-Hayter	T. E. L. 1508	1323–1598	100
Gulf	10-Monahan	T. E. L. 1599	1268–1599	233
Gulf	5-Stampffi	T. E. L. 2408	1331–1332	60
Magnolia	3-Rogers	T. E. L. 2407	1333–3140	20
Magnolia	3-Stampffi	T. E. L. 2408	1340–1352	25
Maer-Stanforth	8-Monahan	T. E. L. 1599	1315–1319	40
United Central	4-Rogers	T. E. L. 2407	1326–1337	94
Humble	4-Ragle	Newman	1086–1097	100
Gulf	2-Rogers	T. E. L. 2406	1324–1330	175
Burns et al	1-Wilson	S. P. Ry. Sec. 1	T. D. 1639	Dry
Boggs-Shell	1-Wilson	A. T. N. C. 117	T. D. 1652	Dry
Cook-McElreath	1-Campbell	Meade Pasture	T. D. 1506	Dry
Staley-Wynn	1-Rogers	T. E. L. Sec. 1596	T. D. 1351	Dry
Brown County				
Mahlstead-Mook	5-Newton	Miller	1268–1292	280
Eastland County				
McLester	1-Allen	Howell Sec. 7	T. D. 3148	Dry
Kimmel et al	1-Lamb	E. T. R. R. Sec. 22	T. D. 2450	Dry

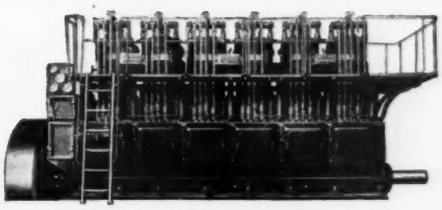
TEXAS
Freestone County—Wortham

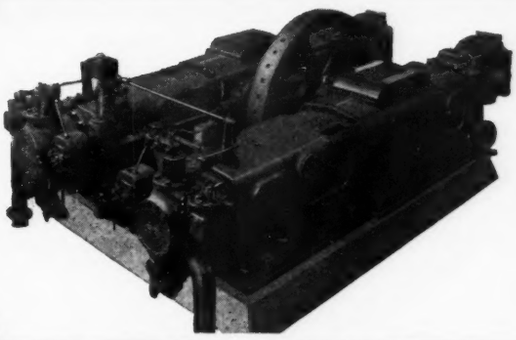
Company	Well No. Farm	Location Survey-Sec.	Depth	Init. Prod.
McDonald Bros	1-McClelland	Ritchie	T. D. 3350	Dry
Humble	15-Dodd	Ritchie	2983–3028	250
Kouri et al	1-Wright Ad.	Wortham	2953–2995	500
Simms	1-Purifoy	Ritchie	3032–3042	50
Irion County				
Virginia-Tex	1-Moelka	Tom Green	T. D. 3505	Dry
Limestone County—Wortham				
Magnolia	25-Boyd	McNulty	T. D. 3127	Dry
Humphreys-Boyd	23-Boyd	McNulty	T. D. 1646	Dry
Boyd	20-Boyd	McNulty	2989–3011	175
Boyd	14-Boyd	McNulty	3000–3014	75
Montague County				
Humphreys-Boyd	1-Jones	Wm. Donoho	863–876	60

Navarro County–Wortham

Company	Well No. Farm	Location—Survey—Sec.	Depth	Init. Prod.
Gulf	7-Bush	Smith	1050–1273	30
Humble	15-Irvine	Taylor	1553–1605	20
Humble	9-Kent	Smith	1575–1610	18
Pure	13-Kent	Smith	1583–1592	20
Atlantic-Penn	1-Absher	Jourdan	T. D. 3086	Dry
Texas-Magnolia	31-Kent	Smith	T. D. 1675	Dry
E. L. Smith	1-McCormick	Byers	T. D. 1867	Dry
J. K. Hughes	4-Morrow	Curry	T. D. 3172	Dry
Palo Pinto County				
Warner et al	1-Hitson	T. & P. Sec. 41	T. D. 4004	Dry
Shackelford County				
Hope Pet	1-Jetter	T. & P. Sec. 14	992–996	90
Stephens County				
Price-Russell	5-Bruce	T. & P. Sec. 50	1992–2080	150
Texas	41-Parks	T. E. & L. Sec. 3369	2027–2055	12
Wichita County				
Atlantic et al	1-Burnett	Carroll Sec. 2	T. D. 2006	Dry
Dee et al	2-Mangold	Castleman Sec. 35	T. D. 1832	Dry
Wilbarger County				
Tippit et al	1-Sheldon	Waggoner 43	T. D. 2460	Dry
A. Mulligan	1-Waggoner	H. & T. C. 101	T. D. 1456	Dry
Humble	1-Castleberry	H. & T. C. 83	1275–1315	250
McCamey-Sherrin	8-Stephenn	H. & T. C. 83	1245–1290	37
McCamey-Sherrin	9-Stephens	H. & T. C. 83	1265–1310	51
Winnipeg	5-Bond	H. & T. C. 100	2300–2308	300
Young County				
Norton et al	1-Hamilton	Holeman	1187–1198	330
Murchinson Fain	7-Schlegel	B.B.B.& C.Sec.1	1191–1205	100
Muse et al	2-Schlegel	B.B.B.& C.1	1181–1187	35
Texas	7-Gambril	B.B.B.& C.1	1197–1214	330
M. Fain	1-Haygood	T.E.& L. 237	1022–1005	335
Simms	2-Carpenter	T. E. & L. 237	1030–1037	200
Simms	7-Carpenter	T. E. & L. 237	1022–1043	300
L. Wilson	2-Haygood	T. E. & L. 237	1017–1030	200
Hooper et al	1-Graves	T. E. & L. 161	1021–1026	29
Perkins et al	1-Powell	T. E. & L. 1586	T. D. 1390	Dry
Burns et al	1-Mothers	T. E. & L. 2445	T. D. 1405	Dry
M. Fain	1-Schlegel	B.B.B.& C.1	T. D. 1241	Dry
Camp	1-Benson	Davidson 1477	T. D. 1219	Dry
Mitchell-Jones	1-Finch	T. E. & L. 38	T. D. 1302	Dry

The Bessemer Type FC-1 Compressor. A four-cycle direct driven compressor with a remarkably low fuel consumption. Incorporates all Bessemer standard features and many engineering improvements.





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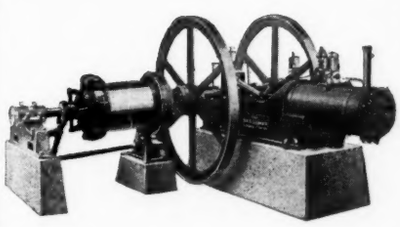

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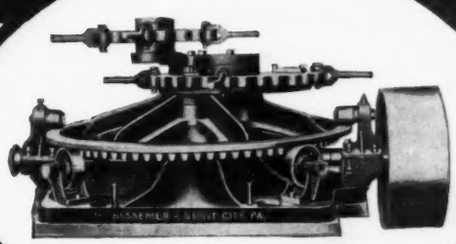

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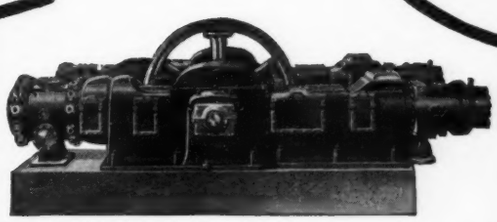

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Current Crude Production

OKLAHOMA

	April 4	Mar. 28
Cushing	22,050	22,250
Yale	7,400	7,350
Jennings	3,900	4,000
Garber, Billings	5,650	5,550
Tonkawa	75,800	78,300
Blackwell	4,650	7,400
North Okmulgee	15,900	15,900
Burbank, Osage county	59,350	57,050
Osage, outside Burbank	34,650	35,150
Healdton	15,650	15,600
Hewitt	15,850	15,900
Duncan	6,250	6,200
Lyons, Deaner	4,400	4,550
Bristow	33,900	33,900
Wewoka	11,250	11,100
Cromwell	36,750	31,950
Graham	9,950	10,100
Stroud	3,350	3,150
Papoose	26,350	29,100
Watchorn	8,900	8,700
Other fields	52,600	51,600
Total	454,650	452,100
Increase		2,550

KANSAS

	April 4	Mar. 28
Eldorado, Towanda	13,200	13,200
Augusta, Foxbush	5,700	5,750
Peabody, Elbing	5,300	5,350
Rainbow Bend	10,750	11,750
Other fields	48,200	49,250
Total	85,300	85,300
No change		

NORTH LOUISIANA

	April 4	Mar. 28
Homer	6,750	6,850
Haynesville	14,550	14,600
Caddo, light	9,350	9,350
Caddo, heavy	2,200	2,250
De Soto, Red River	4,200	4,200
Elm Grove	700	800
Bellevue	4,250	4,050
Cotton Valley	9,300	8,850
Total	51,300	50,950
Increase		350

ARKANSAS

	April 4	Mar. 28
El Dorado	9,300	9,300
Smackover, heavy	86,750	72,100
Smackover, light	32,000	31,700
Nevada	1,400	1,400
Stephens	2,000	2,050
Total	131,450	116,550
Increase		14,900

ROCKY MOUNTAIN

Wyoming

	April 4	Mar. 28
Salt Creek	59,430	58,850
Teapot	1,920	2,260
Big Muddy	3,355	3,215
Grass Creek	4,470	4,600
Elk Basin	900	1,350
Greybull, etc.	100	115
Rock River	3,275	3,280
Lance Creek	640	590
Poison Spider	85	125
Osage	350	340
Hamilton Dome	875	460
Lander	260	275
Pilot Butte	35	40
Lost Soldier	4,250	4,380
Ferris	65	50
Total in Wyoming	80,010	79,930

Colorado

Craig	720	715
Fort Collins	1,575	1,160
Boulder	30	25
Florence	245	250
Rangely	100	110
Tow Creek	165	170
Total in Colorado	2,835	2,430

Montana

Cat Creek	3,300	3,275
Kevin, Sunburst	3,075	3,050
Total in Montana	6,375	6,325

New Mexico

Artesia	685	700
Rattlesnake	550	525
Hogback	500	640
Total in New Mexico	1,735	1,865

Recapitulation

Wyoming	80,010	79,930
Colorado	2,835	2,430
Montana	6,375	6,325
New Mexico	1,735	1,865
Miscellaneous	200	200
Total	91,155	90,750
Increase		405

TEXAS AND COASTAL LOUISIANA

	April 4	Mar. 28
Mexia, Richland, Currie	29,830	31,190
Corsicana, Powell	53,600	54,200
Wortham	66,950	76,800
Wichita Falls district	83,190	84,150
Ranger, lime	26,950	26,889
Ranger, sand*	18,295	16,175
W. Texas: Mitchell Reagan, Scurry counties	14,855	14,535
Panhandle	2,345	2,045
San Antonio, Luling and Mirando	45,620	48,300
Coastal Texas	95,650	93,600
Coastal Louisiana	7,710	8,640
Total	444,995	456,524
Decrease		11,525

*Includes Shackleford, Brown, Coleman, Callahan, Jack, Palo Pinto and Young counties.

CALIFORNIA

	April 4	Mar. 28
Santa Fe Springs	47,000	48,000
Long Beach	115,000	115,000
Huntington Beach	43,000	42,000
Torrance	38,000	38,000
Dominguez	46,000	48,500
Rosecrans	17,000	16,000
Other fields	290,000	290,000
Total	596,000	597,500
Decrease		1,500

Production Summary

Eastern	102,000	100,000
Total Prod. in U. S.	**1,956,850**	**1,949,674**
Increase		7,176

Colliton Syndicate Gets Show in Cherokee

HOUSTON, April 3.—A test of the Colliton Syndicate, about four miles northwest of Ponta, in Cherokee county, made two heads of 36 gravity oil after being shot at approximately the 3300-foot level, March 30, according to advices reaching Houston from Throup.

The test had been drilled to total depth of 3640 feet before plugging back for shooting.

An earlier test of the Colliton Syndicate a number of miles northeast had shown some oil late in 1924. It had been drilled to 4040 feet, where 6¼-inch casing was set. After testing salt water at total depth of 4272 feet, the drill pipe twisted off at 3524 feet and casing parted at that level. When three joints had been pulled about 100 feet of 37.2 gravity oil stood in the hole.

These tests are on, or near, the southwest flank of the Sabine Uplift in East Texas.

New Garber Well Flows 100 Barrels An Hour

TULSA, April 6.—Sinclair No. 25 Belveal, new deep well in Garber field, has been drilled to 4390 feet in sand topped at 4377 feet and is flowing at the rate of 100 barrels hourly. For the 24 hours ending this morning its actual gauge was 2361 barrels. When it had been drilled as far as 4387 it was making 60 barrels an hour and was then deepened three feet into the big pay. It made 106 barrels hourly for the first six hours after reaching the present depth.

Corrected gravity of the crude is 42.07 Be. Although there is some diversity of opinion, most geologists apparently feel convinced that this well is in the Wilcox sand, in the same general horizon as is producing in the Tonkawa deep pay. Other deep wells in the same general area have found what was always considered the Wilcox at depths approximately the same as the new Sinclair well's producing horizon.

The high gravity of the crude and the large initial production also point to its being Wilcox rather than Bartlesville production. While it is reported the well had no Mississippi lime, it is pointed out that in a number of cases wells have found the Wilcox where the Mississippi lime was not present.

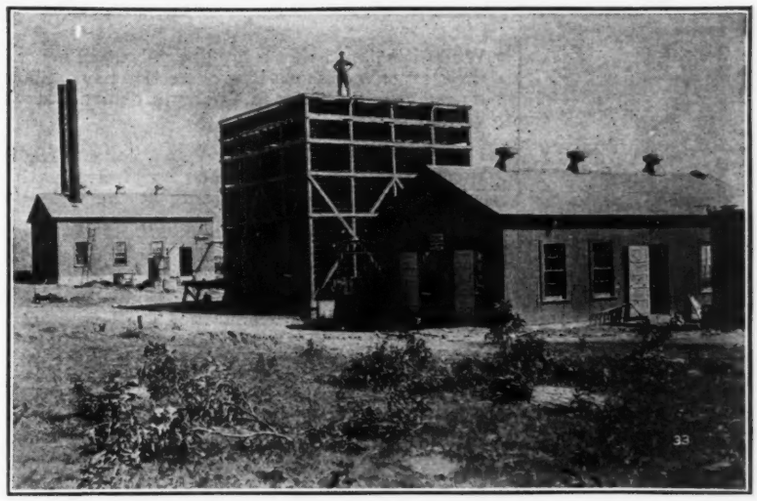
These offsets to the Sinclair well are to be started at once. These are Cosden and Marland, in S.E. corner 13-22-4 west, a north offset to the Sinclair well. Roxana Petroleum Corp. in S.W. corner 18-22-3 west, a diagonal N.E. offset and Sinclair in N.W. corner of 19-22-3 west, a direct east offset.

The Sinclair Belveal well deep sand discovery is in the N.E. corner of 24-22-4 west. Healdton Oil & Gas Co. which has the N.W. 40 acres out of the 160 on which the well is located, is reported to be starting two wells, one in the N.E. corner and one in the S.E. corner of its lease. Carter Oil Co. also is reported preparing to start a well in the N.E. corner N.W. of 24, a half mile due west of the new well. Thus six wells will start at once for the deep sand.

These will be drilled with rotary all the way down to near the top of the sand. With good luck a well this deep may be completed in less than 60 days, but it is probable that average time of drilling will be at least that long. It is reported a movement is on foot to bring about an agreement among operators limiting the number of wells to be drilled to the deep sand at this time, but nothing definite has come of it as yet.

OKLAHOMA CITY.—J. W. Ryan, oil and gas conservation officer of the Corporation Commission, has been transferred from Ardmore to the Holdenville district. J. E. Amis, formerly at Holdenville, has been transferred to Blackwell, succeeding C. L. Roff, who resigned.

ENGINEERS & CONTRACTORS IN NATURAL GAS AND OIL



Always At Your Service On a Moment's Notice

The Hope engineering and construction force never has to wait to organize activities and assemble equipment.

Its organization is always complete and ready—experienced and resourceful. And ample equipment is always on hand to begin operation—usually in a strategic position for almost instant action.

Between decision to do and the actual doing, there need be no delay, no lost motion—if the doing is put squarely up to Hope. And the Hope Company is always ready to assume entire responsibility.

HOPE SERVICE

Engineering counsel, design, construction and contracting—in pipe lines for oil and gas, oil pumping stations, gas compressing and boosting plants, gasoline recovery systems, city and intercity gas mains.

UNIT RESPONSIBILITY

ENGINEERS CONTRACTORS

HOPE Engineering & Supply COMPANY

DESIGNERS MANUFACTURERS

MT. VERNON, OHIO, U. S. A.

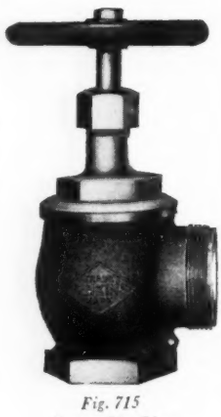


Fig. 715
Bronze Fire Line Angle Valve.

It's *there*— when you need it

While it's hoped that a fire line valve will never be used, experience shows that protection pays. Should a need arise for water in a hurry it demands service without a hitch.

With a Jenkins Fire Line Valve, you can feel it's there when you need it. You can feel sure there will be no corrosion, no sticking at the seat—sure of an uninterrupted flow.

The wide use of this valve by leading hotels, hospitals, and other public buildings is a vote of confidence in its reliability. The Jenkins "Diamond" assures you that such confidence is not misplaced.

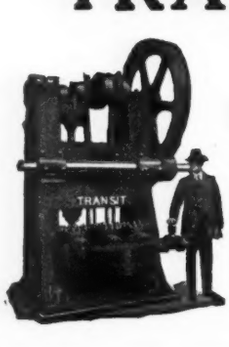
At supply houses everywhere.

JENKINS BROS.
80 White Street ..... New York, N. Y.
524 Atlantic Avenue ..... Boston, Mass.
133 No. Seventh Street ..... Philadelphia, Pa.
646 Washington Boulevard ..... Chicago, Ill.
JENKINS BROS., Limited
Montreal, Canada *London, England*

Always marked with the "Diamond"
Jenkins Valves
SINCE 1864

ADAMSON
WELDED TANKS
All Capacities-65 to 20,000 Gallons
ADAMSON MFG. CO. EAST PALESTINE O

TRANSIT PUMPS



Standard
PIPE LINE, REFINERY, FIELD
Pumps

National Transit Pump & Machine Co.
OIL CITY, PA.
District Offices: New York, Philadelphia, Tulsa, Cleve'and, Pittsburgh, Houston and Denver

Realignments Made in Salt Creek Field

Staff Special

CASPER, April 7.—The first of a number of realignments rumored for the Salt Creek field has been effected. The New York Oil Co. has obtained control of the Central Pipe Line Co. built by the E. T. Williams Oil Co. in 1923. The Texas Co. has had 49 per cent interest in the line which is eight-inch and 45 miles long. It is understood that the New York company bought the stock of both companies.

The Williams Co. which has operated a gasoline plant in Salt Creek, last week sold the plant to the Midwest Refining Co. Gas production has grown so small as to make the plant unprofitable. The Midwest will use it as a booster station for its big gasoline plant.

With the disposition of these properties and the recent leasing of its skimming plant in Oklahoma to the Henry H. Cross Co., the Williams company has reverted to its former status of a producing company and will continue on that basis.

The New York Oil Co. which has large business as a producer and distributor of gas, operates the Central pipe line as an oil line. It will lay a 10-inch gas line from Teapot Dome to Casper, having recently contracted with the receivers of the Mammoth Oil Co. for casing head gas produced with the oil at Teapot. This amounts to about 5,000,000 feet a day and was contracted at 6 cents a thousand for a two-year period. It will also build a compression gasoline plant to dry this gas. The Hope Engineering & Supply Co. will lay the line and build the plant.

Test Drilling Near Westbrook Pool

TULSA, April 6.—Owens, Stalker, Sloan C. Kors, Independent operators of Tulsa, have started drilling a test in Mitchell county, Tex., about 15 miles south of the Westbrook pool. The well is located in the center of the NE of sec. 6, Block 19, Lavaca Navigation survey. It will be an interesting test on account of its relation to the Westbrook and the possibility it presents of finding production on a "trend" between Westbrook and the Big Lake field. The location was selected by Jon A. Udden, formerly chief geologist of the Sinclair Oil & Gas Co., who is now associated with these operators.

TULSA.—William H. Foster, vice-president of the Reiter-Foster Oil Corp., has gone to Dallas on business for his company. John W. Bates, general superintendent and formerly with the Roxana Petroleum Corp., already is in Texas, making arrangements to start several wells.

North Texas

41-43 Water White Kerosene
Sunshine Consolidated Oil Co., Wichita Falls, Tex.

North Louisiana

41-43 Water White Kerosene
Caddo Central Oil & Refining Co., Shreveport, La.
Louisiana Oil Refg. Corp., Shreveport, La.

Kentucky

42-44 Water White Kerosene
Great Southern Refining Co., Lexington, Ky.
Pgh. Oil & Refg. Co., Pittsburgh, Pa.

43-45 Water White Kerosene
Ashland Refining Co., Ashland, Ky.

Oklahoma

41-43 Water White Kerosene
Bell Oil & Gas Co., Tulsa, Okla.
Cameron Refg. Co., Ardmore, Okla.
Lubrite Refining Co., St. Louis, Mo.
Imperial Oil Mktg. Co., Tulsa, Okla.
Roxana Petroleum Corp., St. Louis, Mo.
Tidal Refg. Co., Tulsa, Okla.

42-44 Water White Kerosene
Imperial Oil Mktg. Co., Tulsa, Okla.

44-46 Water White Kerosene
Altitude Petroleum Co., Tulsa, Okla.

Arkansas

42-44 Water White Kerosene
Imperial Oil Mktg. Co., Tulsa, Okla.

Neutral Oils

Pennsylvania

200 Vis. No. 3 Asso. Filt.
Butler County Oil Refg. Co., Bruin, Pa.
Emery Mfg. Co., Bradford, Pa.
Empire Oil & Grease Co., Inc., Oil City, Pa.
Independent Refining Co., Oil City, Pa.
Kendall Refining Co., Bradford, Pa.
Pennsylvania Oil Products Refining Co., Warren, Pa.
Seneca Oil Works, Warren, Pa.

180 Vis. No. 3 Asso. Filt.
Emery Mfg. Co., Bradford, Pa.
Seneca Oil Works, Warren, Pa.

150 Vis. No. 3 Asso. Filt.
Emery Mfg. Co., Bradford, Pa.
Butler County Oil Refg. Co., Bruin, Pa.
Independent Refining Co., Oil City, Pa.
Pennsylvania Oil Products Refining Co., Warren, Pa.
Seneca Oil Works, Warren, Pa.

150 Vis. No. 4½ Filt. (Red)
Crystal Oil Works, Oil City, Pa.

Ohio

90 Vis. at 100° F. No. 2 Color (Pale)
Craig Oil Co., Toledo, O.

200 Vis. at 100° F. No. 3 Color (Pale)
Craig Oil Co., Toledo, O.

Oklahoma

200 Vis. No. 3 color
Bell Oil & Gas Co., Tulsa, Okla.

Gulf Coast

200 Vis. No. 2-2½ Color Unfilt. Pale
Keen & Woolf Oil Co., Houston, Texas

300 Vis. No. 2-2½ Color Unfilt. Pale
Keen & Woolf Oil Co., Houston, Texas

500 Vis. No. 3 Color Unfilt. Pale
Keen & Woolf Oil Co., Houston, Texas

750 Vis. No. 3-3½ Color Unfilt. Pale
Keen & Woolf Oil Co., Houston, Texas

200 Vis. No. 4½-5½ Color Unfilt. Red
Keen & Woolf Oil Co., Houston, Texas

300 Vis. No. 4½-5½ Color Unfilt. Red
Keen & Woolf Oil Co., Houston, Texas

500 Vis. No. 4½-5½ Color Unfilt. Red
Keen & Woolf Oil Co., Houston, Texas

750 Vis. No. 4½-5½ Color Unfilt. Red
Keen & Woolf Oil Co., Houston, Texas

1200 Vis. No. 3½-4 Color Unfilt. Pale
Keen & Woolf Oil Co., Houston, Texas

2000 Vis. No. 3½-4½ Color Unfilt. Pale
Keen & Woolf Oil Co., Houston, Texas

120 Vis. Black
Keen & Woolf Oil Co., Houston, Texas

210 Vis. Transmission Lube.
Keen & Woolf Oil Co., Houston, Texas

Illinois

180 Vis. No. 3-3½ Asso. Filt.
Indian Refining Company, Lawrenceville, Ill.

180 Vis. No. 5 Asso. Filt.
Indian Refining Company, Lawrenceville, Ill.

Cylinder Oils

Pennsylvania

600 Steam Refined
Bradford Oil Refg. Co., Bradford, Pa.
Butler County Oil Refg. Co., Bruin, Pa.
Crystal Oil Works, Oil City, Pa.
Emery Mfg. Co., Bradford, Pa.
Independent Refining Co., Oil City, Pa.
Lucinda Refining Co., Lucinda, Pa.

635 Steam Refined
Bradford Oil Refg. Co., Bradford, Pa.
Emery Mfg. Co., Bradford, Pa.

650 Steam Refined
Bradford Oil Refg. Co., Bradford, Pa.
Butler County Oil Refg. Co., Bruin, Pa.
Emery Mfg. Co., Bradford, Pa.
McKean County Refining Co., Bradford, Pa.
Seneca Oil Works, Warren, Pa.

600 Flash
Bradford Oil Refg. Co., Bradford, Pa.
Butler County Oil Refg. Co., Bruin, Pa.
Emery Mfg. Co., Bradford, Pa.
Independent Refining Co., Oil City, Pa.
Kendall Refining Co., Bradford, Pa.
McKean County Refining Co., Bradford, Pa.
Waverly Oil Works, Pittsburgh, Pa.

600 Warren E.
Butler County Oil Refg. Co., Bruin, Pa.
Pennsylvania Oil Products Refining Co., Warren, Pa.

600 Oil City E.
Butler County Oil Refg. Co., Bruin, Pa.
Carnegie Refg. Co., Carnegie, Pa.
Independent Refining Co., Oil City, Pa.
Pennsylvania Oil Products Refining Co., Warren, Pa.

600 Filtered D.
Butler County Oil Refg. Co., Bruin, Pa.
Pennsylvania Oil Products Refining Co., Warren, Pa.

Cold Test Stock (bright filtered)
Carnegie Refg. Co., Carnegie, Pa.
Kendall Refining Co., Bradford, Pa.
Mutual Refg. Co., Warren, Pa.
Pennsylvania Oil Products Refining Co., Warren, Pa.
Warr-Penn Refining Co., Warren, Pa.

Cold Test Stock (dark filtered)
Carnegie Refg. Co., Carnegie, Pa.
Pennsylvania Oil Products Refining Co., Warren, Pa.
Warr-Penn Refining Co., Warren, Pa.

Black Oil
Emery Mfg. Co., Bradford, Pa.

Motor Oils

Pennsylvania—100% Pure

Butler County Oil Refg. Co., Bruin, Pa.
Carnegie Refg. Co., Carnegie, Pa.
Continental Refining Co., Oil City, Pa.
Emery Mfg. Co., Bradford, Pa.
Empire Oil & Grease Co., Inc., Oil City, Pa.
Independent Refining Co., Oil City, Pa.
Seneca Oil Works, Warren, Pa.
Waverly Oil Works Co., Pittsburgh, Pa.

Illinois

Indian Refining Company, Lawrenceville, Ill.

Ohio

Craig Oil Co., Toledo, O.

Greases

Cup Grease
Litwood Oil & Supply Co., Ft. Worth, Texas
Yuba Refg. Co., Nacogdoches, Texas

Gear Grease
Litwood Oil & Supply Co., Ft. Worth, Texas
Yuba Refg. Co., Nacogdoches, Texas

Wax Distillate

Pennsylvania

34-34½ Gravity
Bradford Oil Refg. Co., Bradford, Pa.

Wax

Pennsylvania

122-124 White Crude Scale
Butler County Oil Refg. Co., Bruin, Pa.
Emery Mfg. Co., Bradford, Pa.
Independent Refining Co., Oil City, Pa.
Kendall Refining Co., Bradford, Pa.

128-130 Refined
Waverly Oil Works Co., Pittsburgh, Pa.

124-126 Crude Scale (off white)
Crystal Oil Works, Oil City, Pa.

Oklahoma

124-126 White Crude Scale
Bell Oil & Gas Co., Tulsa, Okla.

Illinois

124-126 White Crude Scale
Indian Refining Company, Lawrenceville, Ill.

Fuel Oil

Pennsylvania

36-40 Fuel Oil
Bradford Oil Refg. Co., Bradford, Pa.
Carnegie Refg. Co., Carnegie, Pa.
Emery Mfg. Co., Bradford, Pa.
Lucinda Refining Co., Lucinda, Pa.
McKean County Refining Co., Bradford, Pa.

30-34 Fuel Oil
Butler County Oil Refg. Co., Bruin, Pa.
Independent Refining Co., Oil City, Pa.
Mutual Refg. Co., Warren, Pa.

Oklahoma

26-30 Fuel Oil
Bolene Refining Co., Enid, Okla.

30-32 Fuel Oil
Bolene Refining Co., Enid, Okla.

36-38 Straw Distillate
Cameron Refg. Co., Ardmore, Okla.

38-40 Straw Distillate
Bolene Refining Co., Enid, Okla.

32-36 Gas Oil
Bolene Refining Co., Enid, Okla.
Cameron Refg. Co., Ardmore, Okla.
L. O. Carter Co., Tulsa, Okla.
Roxana Petroleum Corp., St. Louis, Mo.

22-24 Fuel Oil
L. O. Carter Co., Tulsa, Okla.

24-26 Zero Fuel Oil
Altitude Petroleum Co., Tulsa, Okla.

North Louisiana

14-18 Fuel Oil
Caddo Central Oil & Refining Co., Shreveport, La.

30-32 Gas Oil
Caddo Central Oil & Refining Co., Shreveport, La.

34-36 Gas Oil
Caddo Central Oil & Refining Co., Shreveport, La.

18-22 Fuel Oil
Louisiana Oil Refg. Corp., Shreveport, La.

32-36 Gas Oil
Louisiana Oil Refg. Corp., Shreveport, La.

North Texas

34-38 Gas Oil (dark)
Texhoma Oil & Refg. Co., Wichita Falls, Tex.

38-40 Distillate-Prime White
Noble Oil & Gas Co., Tulsa, Okla.

24-26 Fuel Oil
Sunshine Consolidated Oil Co., Wichita Falls, Tex.

South Texas

22-24 Fuel Oil
Pioneer Oil & Refg. Co., San Antonio, Texas

Kentucky

38-40 Gas Oil (light)
Ashland Refining Co., Ashland, Ky.

34-38 Gas Oil (light)
Great Southern Refining Co., Lexington, Ky.

34-38 Gas Oil (dark)
Ashland Refining Co., Ashland, Ky.
Great Southern Refining Co., Lexington, Ky.

30-32 Fuel Oil
Ashland Refining Co., Ashland, Ky.

28-30 Fuel Oil
Ashland Refining Co., Ashland, Ky.

24-26 Fuel Oil
Ashland Refining Co., Ashland, Ky.
Great Southern Refining Co., Lexington, Ky.

Road Oil

Oklahoma

Altitude Petroleum Co., Tulsa, Okla.

Petroleum Coke

North Louisiana

Shreveport Prod. & Refg. Co., Shreveport, La.

Conservation Board Sends Query To Oil Paper Editors

WASHINGTON, April 3.—The Federal Oil Conservation Board, March 17 sent out a questionaire to editors of the oil papers of the country, seeking information as to what should be done toward effective conservation of the nation's oil supply.

Secretary of the Interior Work, as chairman of the board, said in making public the letter addressed to the editors, that the board would feel that its inquiry into conditions affecting the entire oil problem would be incomplete without the views of the men who, through their journals, have been the "advisors and counsellors" of the industry since the very inception of the industry in this country.

The letter, addressed to 59 individuals, is as follows:

"Your views will be much appreciated on the topics which follow and on any others which you may desire to discuss.

"(1) To what extent, if any, do you consider a shortage of petroleum imminent in this country?

"(2) To what extent and in what manner do you consider that any future shortage of domestic petroleum can or will be lessened,

"(a) By the increased use of substitutes including foreign oil, shale oil, coal distillates, or organic distillates;

"(b) By reducing or avoiding waste in the production, transportation, refining, or distribution of petroleum and its products;

"(c) By reducing exports of domestic crude petroleum and its products;

"(d) By the substitution of coal for fuel oil; by the introduction of more efficient types of internal combustion engines; or by any similar economy in the use of petroleum and its products; and;

(e) By increasing the total recovery from the ground, which is commonly held to average not more than about 20 per cent by present day methods?

"(3) In view of the existing situation, do you consider that the use of oil for domestic heating or for generating steam should be generally fostered and encouraged?

"(4) Considering the possibilities of the elimination of waste in retail distribution,

"(a) Are there too many 'links in the chain from producer to consumer?'

"(b) Are there too many retail outlets for reasonable economy in distribution? The numerous roadside filling stations of the present day are, as a rule, convenient, pleasing to the eye, an assurance of quality, and a community asset; but what are the economics of this extensive duplication of facilities existing and prospective? If not justified, what remedy do you suggest?

"(5) What are the underlying causes of the more or less temporary periods of over-production of petroleum? Do you think it will be practicable to control production, and if so, by what means or in what manner? This would include your views as to the practicability of Mr. Doherty's proposal for unit operation and any other methods of controlling the development of new pools and preventing unneeded production.

"(6) To what extent, if any, do you consider that the exploration of new pools or fields can be carried on and controlled without bringing them into actual production until the market condition warrants increased production? Do you consider that it will be practicable for the government and the industry to co-operate in setting aside drill-tested reserves which will not be put on production until they are needed?

"(7) How can the oil industry and the public be brought to more clearly realize their respective responsibilities and to understand that the policies and practices regarding such a vital necessity of our national life as petroleum must be formulated with due regard to the general welfare?

"(8) What steps or arrangements do you consider are desirable and practicable that will lessen the handicaps which our nationals now encounter in connection with the exploration and development of foreign oil fields, and will enable them to compete on more even terms with the nationals of other countries? Include in your statement any specific assistance that you think can or should be rendered by any branch of the national government in this matter.

"We are hoping to obtain by inquiries such as this a consensus of the best opinion, with specific suggestions as to ways and means, from those qualified to advise this board, and we therefore ask for your full co-operation. For your information a copy of the letter of the President dated December 19, 1924, is inclosed. Doubtless other phases of the problem will occur to you. Your full and frank views are desired."

I DIDN'T KNOW THAT THE STATE CAPITOL WAS LOCATED IN THIS TOWN
HAW! HAW! HAW! STATE CAPITOL YOUR EYE! THAT'S OUR LATEST GASOLINE STATION!
SEDGWICK

ONE OF THE SIGHTS IN MOST ANY TOWN

THE EDITORS' VIEWPOINT

Must Explain to the Public

IF Standard Oil and the other big oil interests, don't want to be constantly pilloried as in the Federal Trade Commission's recent report, they must do more than obey the law,—they must explain to the public their every act under the law.

Every big company executive knows the public is suspicious of price advances, knows that most of our investigations and adverse legislative proposals spring from price changes which the public does not understand. Every big oil executive has discussed this point time and again, in meeting and out.

And yet here in this day of presumably big company enlightenment, these same executives have been posting price advances the past few weeks which have doubled the price on crude oil and raised gasoline 30 per cent and more, all without a single word of explanation to any one. Those who are informed on the industry's situation know these prices are natural and justified, but the public doesn't know it.

Why shouldn't the public be suspicious of the oil industry? Why shouldn't political statesmen be demanding more investigations? Why shouldn't the biased Federal Trade Commission return bolshevik reports?

If all those selling supplies and equipment to the oil companies were to double their prices tomorrow without a word of explanation and if the oil industry didn't happen to have the facts from common knowledge, there would be a roar against the supply men that would rock every derrick in the land. Half the industry at least, would be running for the much despised Federal Trade Commission before morning, crying aloud for help.

Can the oil men blame the public then?

If the big oil companies want the public to think well of them they must not only act right but must explain their actions. As the public thinks a few big companies are the oil industry, these companies must first explain themselves before the industry as a whole can make explanation which the public will accept.

Only the Standard Oil Company can explain its acts. Only the big company executive can say why he posted a higher or lower price. Certainly it is neither the prerogative nor the responsibility of the rest of the industry to talk for and on behalf of the bigger companies.

The American Petroleum Institute cannot explain an individual company's acts, because it represents the whole industry and has no knowledge of the whyfores of any company's conduct.

Nor can the newly formed committee on public relations.

Only Standard Oil and the other big companies who are so continuously before the bar of public opinion, can enter their pleas of guilty or not guilty and make their defense.

The burden of public explanation is not alone on the big marketing companies who sell to the public but it is also upon the big crude oil companies. Just because the Prairie Oil & Gas Co., for instance, doesn't get within a thousand miles of the ultimate consumer, does not relieve it of explaining its crude price changes. In fact the job starts with the crude oil companies because their's is the foundation of the industry's price structure.

Is there anything more typical of the oil industry than the present situation? Here is probably the most misunderstood and most unjustly criticized industry in the world. It knows why it is misunderstood—because the public hasn't the facts regarding it. Its leaders talk much of ways to present those facts to the public. And while that discussion is on along come the best reasons in the world for higher prices, reasons which force higher prices on the industry—prices which are direly needed to relieve it from financial stress. And yet this big industry with some of the ablest business executives in the country, calmly marks up those prices to the public without a single word of explanation and asks sympathy because of the attacks by the uninformed.

No one but an oil man could muff it like that.

Every price change should be fully, frankly and comprehensively explained by every company making a change, whether it is crude oil or gasoline. The real reasons for the change should be given. Effort should be made to impress the public, with the honesty and sound judgment of the company. The explanation should not be so drawn that it would appear that sixteen lawyers had been retained to see how little could be put in it. Respect the public's judgment.

Continuation of the present policy of silence is suicidal. —W. C. P.

Credit to the Credit Manager

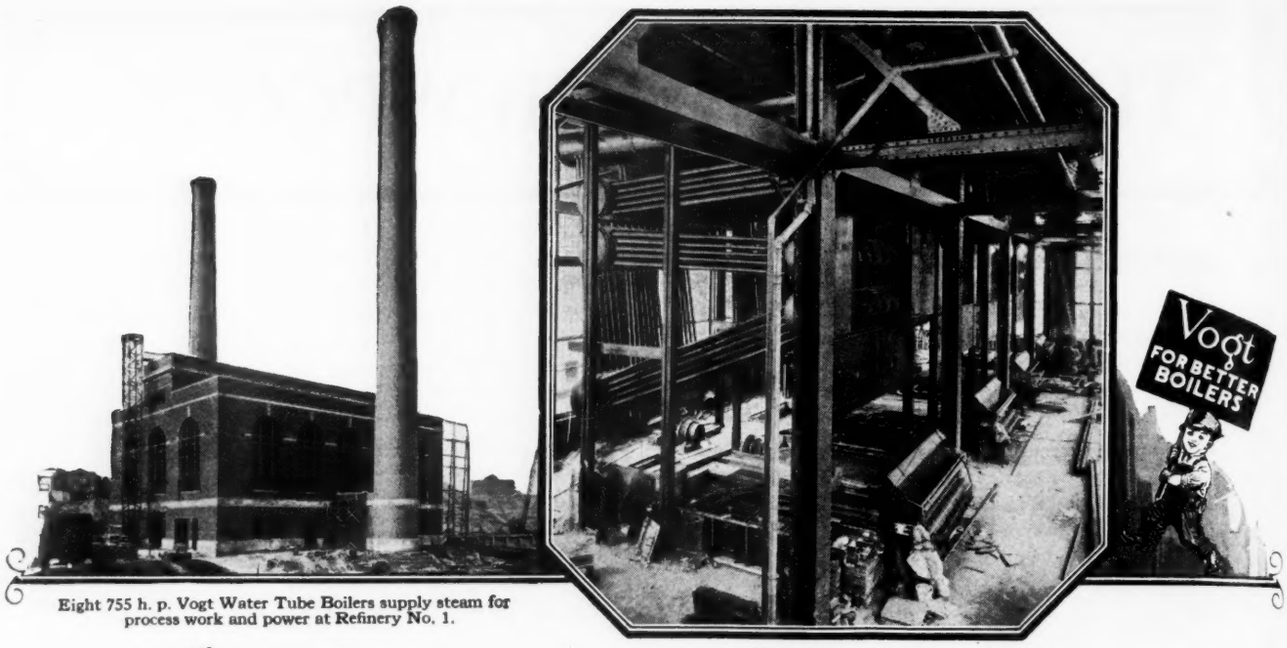
AT a meeting of salesmen of an oil company recently the credit manager, when called on for a talk, prefaced it with a statement that he was the most unpopular man in the company. Next to him, he said, was the treasurer of the concern. There was more than a grain of truth in what he said. Yet many of the salesmen he was talking to, had in their pockets then nice comfortable bonus checks passed out at the end of the year's work out of the company's earnings.

Do you suppose for a moment those bonus checks would have been possible had it not been that these two individuals were eternally vigilant in keeping the company's costs down and making sure that its resources did not go into unwise credit extension?

The business world generally, undoubtedly is entering a period of keener competition than at any time since the war. In the struggle for success, even for survival, business institutions are going to require greater effort on the part of their men, and that effort must be accompanied by economy in operations, even to the small items of office and personal expense.

That effort must be intelligent economy, of course. The money must be spent where it will bring into the business dollars and cents, not promises and rosy visions of the future. That means the credit manager and the treasurer, or comptroller or auditor—whatever his title may be—in most companies is going to play a greater part in a company's operations than heretofore.

Salesmen and those who call themselves "business producers" should co-operate with these executives to the fullest possible degree. When the story is finally written, and the check depends, possibly even the security of a man's job books for the year closed, it is upon them that the bonus itself.—V. B. G.



Eight 755 h. p. Vogt Water Tube Boilers supply steam for process work and power at Refinery No. 1.

Another great Oil Refiner has standardized upon Vogt WATER TUBE BOILERS

1st order on June 3, 1919, for	6—500 h. p. Vogt Boilers.....	= 3000 h. p.
2nd order on Aug. 11, 1922, for	2—500 h. p. Vogt Boilers.....	= 1000 h. p.
3rd order on Mar. 9, 1923, for	11—755 h. p. Vogt Boilers.....	= 8305 h. p.
4th order on June 25, 1923, for	1—755 h. p. Vogt Boiler	= 755 h. p.
	Total horse power of Vogt Boilers	13060 h. p.

These orders tell the story of the complete success of Vogt Water Tube Boilers at the refineries of this *large oil company. It is a story of efficient operation at high ratings, low maintenance cost, reliability and accessibility for cleaning.

The dates of the orders are significant. Three years elapsed between the first and second orders—sufficient time for thorough testing of the boilers and the elimination of the "guess work" still so common in the selection of water tube boilers.

Write for additional data and Bulletin WT-2.

*Customer has asked that name be given only upon special request.

HENRY VOGT MACHINE CO.

Incorporated

LOUISVILLE, KENTUCKY

NEW YORK · CHICAGO · PHILADELPHIA · DALLAS

Manufacturers of Water Tube and Return Tubular Boilers, Drop Forged Steel Valves and Fittings, Oil Refinery Equipment, Ice Making and Refrigerating Machinery

HERE AND THERE

Harold R. Deal, western advertising manager of the Tide Water Oil Sales Corp., San Francisco, has just returned to that city after a trip through southern California where he secured a number of new outdoor advertising locations on the main highways for Veedol products. These outdoor display signs in the 12 western states are proving advantageous to Veedol dealers, the signs being a part of the national advertising campaign of the Tide Water, according to Mr. Deal.

* * *

Daniel P. Barnard, formerly divisional director of the research laboratory of applied chemistry at the Massachusetts Institute of Technology, Boston, has joined the research staff of the Standard Oil Co. of Indiana at Whiting, Ind. He will be associated with Robert E. Wilson in directing the investigations in the new engine laboratory of the company.

* * *

L. O. Stevens and John Glerum, formerly owners of Stevens & Glerum service station at Holland, Mich., have sold their station and are now doing business at Coldwater, Mich. as the Branch Oil Co., distributing Sun gasoline and Sunoco oils, wholesale and retail, according to Mr. Stevens, manager.

* * *

Boyd Underwood, field superintendent for the Kentucky Glycerine Co., Winchester, Ky., has just completed storage magazines on the American Rolling Mill Co. tract near Ashland, Ky., to meet requirements for torpedo work in that district, according to O. P. Hine, manager of the former company.

* * *

W. F. May, representative at Jackson, Tenn. of the lubricating department of the Skelly Oil Co., covering Mississippi and Tennessee, has resigned, effective April 1, according to J. Litsey Smith, of the Skelly headquarters at El Dorado, Kan.

* * *

Edgar M. Hausser has joined the sales staff of Jewett & Sowers Oil Co., Chicago, to take care of the trade in southeastern Wisconsin, according to a recent number of "The Jewell," the company's official house organ.

* * *

John C. Reagan, of the Spot Oil Co., Inc., Tully, N. Y., reports the weather fine and business opening up well in his territory.

* * *

Mr. Lyons of Owensboro, Ky. has succeeded Mr. Walker as manager of the Standard Oil Co. at Paducah, Ky.

Frank J. Schauwecker has been recently transfered from the production department of the Ohio Valley Refining Co., St. Marys, W. Va., to the sales division, according to H. G. Triplett. Mr. Schauwecker will cover southeastern Ohio.

Tommy Thompson

Thompson Joins Forces of Brecht Co.

ST. LOUIS, April 4.—E. R. (Tommy) Thompson, known for years to jobbers the country over as the man who sold cans for the St. Louis Tin & Sheet Metal Working Co., which recently changed its name to the St. Louis Can Co., has resigned from that company to associate himself with the Brecht Co. also of St. Louis. He is manager of the can department with that company.

Mr. Thompson states that the Brecht Co., which has been doing business since 1853 as manufacturer of refrigerating and packing house equipment, pails and cans, plans to enlarge its can department greatly to manufacture a full line of lithographed cans and is going to specialize on the needs of the oil and grease business for containers.

* * *

J. H. Sherrill, president of the Sherrill Oil Co., Pensacola, Fla., was a recent visitor at Birmingham, Ala., according to J. Gregory Johnston, president of the General Oil Corp., Birmingham.

* * *

J. P. Flynn, president, and W. R. Reitz, secretary and treasurer of the Reno Oil Co., Sistersville, W. Va., have just returned from a two weeks' trip through the oil fields of Oklahoma.

* * *

E. G. Maxwell, formerly agent for the Mutual Oil Co., Sterling, Colo., is now with C. O. Van Sandt, agent for the Sinclair Refining Co. at Sterling.

W. C. Pettingell, western sales manager of the Tide Water Oil Sales Corp., San Franciso, is in Los Angeles working with C. J. Kay, South Pacific district manager, in assisting Veedol dealers to increase their sales and to develop dealers into more successful merchandisers. Mr. Pettingell states that the results so far have been encouraging, according to Harold R. Deal, western advertising manager.

* * *

William Polje, formerly in the advertising department of the Skelly Oil Co., El Dorado, Kan., and later with the Central Advertisers Agency at Wichita, is now at Kansas City, training to become a salesman for the Alexander Hamilton Institute, according to J. Litsey Smith, of the Skelly company, at El Dorado.

* * *

S. T. Hoover, of the Chicago offices of the Fred G. Clark Co., was at El Dorado, Kan. recently. Mr. Hoover took off sufficient time from business duties to show several of his friends how the game of golf should be played, reports J. Litsey Smith, of the Skelly Oil Co., El Dorado.

* * *

George W. Polk, proprietor of Polk Oil Co., Warsaw, Ind., who is building a service station at Silver Lake, Ind. and two at Warsaw, which he expects to have in operation by May 1, declares that business is getting better every day. Mr. Polk has installed one storage tank for high test gasoline.

* * *

J. G. Grimm, who has been salesman and branch manager for the Freedom Oil Works Co. for the past six years at Steubenville and Youngstown, O., and Wheeling, W. Va., is now salesman with the Cities Service Oil Co. at Youngstown, covering Ohio territory.

* * *

H. B. White, Shirley, Ind., formerly with the Standard Oil Co. of Indiana, has opened an Independent bulk station at Shirley, operating under the name of White Oil Co. Mr. White is distributing Marland products.

* * *

E. E. Wright, secretary and acting manager for the Norton Oil Co., Scio, N. Y., who recently made a trip through Kentucky and Tennessee, reports both the oil and coal industry in an unsettled condition.

* * *

Steven Houman, Hudson, Wis., has purchased the service station of Frank H. Bowers, agent for the White Eagle Oil & Refining Co. at Hudson. Mr. Houman will handle White Eagle products.

$80,000,000 Collected in 35 States In 1924 as Tax on Gasoline

By Roger B. Stafford
N. P. N. STAFF WRITER

CLEVELAND, April 4

SUNSHINE is the gasoline dealer's best business friend. When the skies are blue and the breezes balmy, the cash drawer tinkles frequently. When weather is rainy and winds are chilly, the tinkle is less frequent.

This grasp of the weather on the oil industry is emphasized once again in analyzing gasoline tax returns from 35 states and the District of Columbia which had taxes in 1924. Tax receipts almost reached $80,000,000.

The average consumption of gasoline per car or truck in the United States last year was 457 gallons. This figure is undoubtedly greater than the volume of gasoline consumed by the average passenger car but a great deal less than half of the consumption of trucks.

In Pennsylvania, the Atlantic Refining Co. estimates the average passenger car consumes 294 gallons per year; the light truck 700 gallons, and the heavy truck 2060 gallons. That average probably would hold for the country with only slight variations.

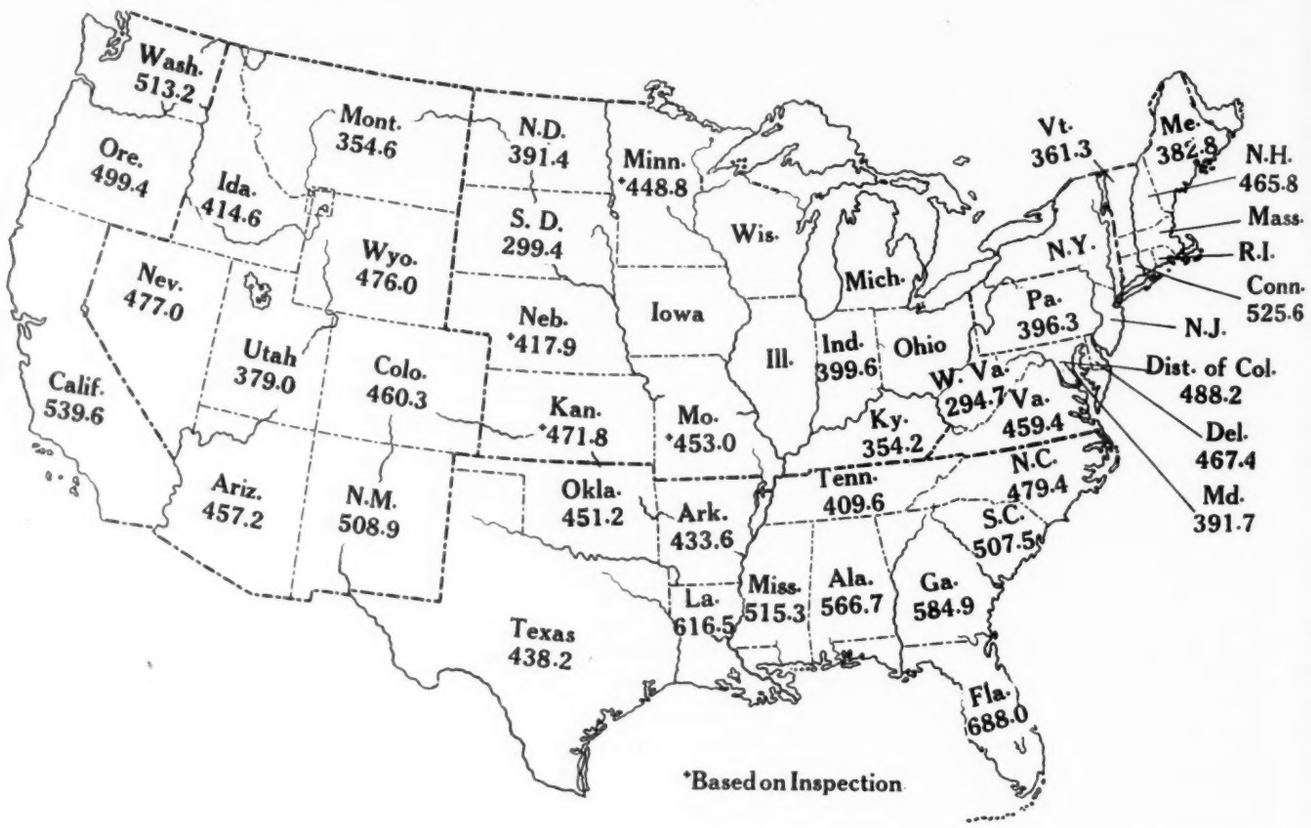
A comparison of the 457-gallon average per car during 1924 with the average per car consumption in previous years is not available because of the absence of complete statistics for previous years. It is probable that the average consumption last year was lower than in 1923. A lower average is shown in 18 of 32 states where comparisons can be made, and a higher average in 13 of the states. There was less than one gallon of difference in the average per car consumption in Wyoming.

Receipts from gasoline taxes last year amounted to $76,474,019 according to reports to National Petroleum News by the collecting agencies in the various states. These reports covered either the calendar year or the fiscal year for several states which ended during 1924. Reports to the Department of Commerce give a total of $79,734,490. In the department's report, no account is taken in some states of rebates for gasoline used for purposes other than motor vehicle fuel.

The $76,474,016 represents tax receipts collected on 3,766,387,098 gallons sold in the 35 states and District of Columbia in which were registered on Dec. 31, last, 8,986,807, or 50.7 per cent of the 17,726,507 automobiles then under registry in the United States.

The 13 states in which gasoline was not taxed during 1924, contained 8,829,700 or 49.3 per cent of the automobiles in this country. Since Jan. 1 Missouri, Michigan, Wisconsin and Nebraska have been added to the tax states and other states probably will fall in line. However, some of the states with largest registrations are outside the tax fold. These are New York, Ohio and Illinois, each with registrations well over the million mark.

A glance at the accompanying map showing average consumption of gasoline in the tax states and four states in which average consumption may be approximated from inspection figures, shows that the south still leads in the average car consumption. Florida, as in 1923, stands at the head of the list. Its per car average is 688 gallons or 12 gallons more than in 1923. Florida's predominant position is due to the all-year motoring possible there and the great number of tourists' cars in the state during the winter months which help to boost the state's average. Monthly tax figures have not been published by the state but inspection figures indicate greater winter demand



A Service That Blankets the Country

CALIFORNIA
LOS ANGELES: Shields, Harper & Co., 1429 South Los Angeles St.
SAN FRANCISCO: Shields, Harper & Co., 558 Howard Street

COLORADO
DENVER: Eaton Metal Products Co., 4800 York Street

FLORIDA
JACKSONVILLE: Dixie Culvert & Metal Co.

GEORGIA
ATLANTA: Dixie Culvert & Metal Co.

ILLINOIS
CHICAGO: Amco Sales Corporation, 644 W. Washington Blvd.

MISSOURI
KANSAS CITY: Butler Manufacturing Co. 1324 Grand Avenue
ST. LOUIS: Metal Hose & Tubing Co., Inc., 1621 Pine Street

METAL HOSE & TUBING CO.
INCORPORATED
236 TILLARY STREET
BROOKLYN, N.Y.

THERE is now a Triplexd distributor, carrying ample stocks, within not more than a day's journey of practically every service station in the United States and Canada. You are thus assured quick delivery of any size Triplexd Gasoline Hose, in any number of lengths, whether you are a mile or three thousand miles from the factory. When in need of hose or couplings, get in touch with any distributor listed here.

ENGLAND
LONDON: J. Bazley-White Jr., 3 Love Lane, Eastcheap, E. C. 3

MINNESOTA
MINNEAPOLIS: Butler Manufacturing Co., 900-914 Sixth Ave., S. E.

NEW YORK
BROOKLYN: Metal Hose & Tubing Co., Inc., 236 Tillary Street

OHIO
CLEVELAND: Consumers Rubber Co., 1302 Ontario Street, N.

PENNSYLVANIA
PITTSBURG: Rutledge Equipment Co., 1741 Oliver Building

TEXAS
HOUSTON: Peden Iron & Steel Co., 700 N. San Jacinto Street
SAN ANTONIO: Peden Iron & Steel Co., 1401 South Flores Street

CANADA
TORONTO, ONT.: Dunlop Tire & Rubber Goods Co., Ltd.

Table No. 1

Distribution of consumption over year in various sections of the country. (Figures represent gallons of gasoline on which taxes were paid in 1924.)

	Arizona	Indiana	Miss-issippi	New Hampshire	South Carolina	Wash-ington
January	1,706,337	13,693,046	4,117,356	671,942	5,262,975	7,358,236
February	1,787,622	11,391,185	4,095,351	472,261	4,527,554	8,559,193
March	1,792,856	14,886,873	3,264,176	787,823	5,434,481	10,421,627
April	1,796,988	19,883,229	4,854,773	1,658,666	5,709,729	11,696,997
May	1,958,729	22,551,464	3,285,000	3,040,621	6,388,733	13,111,103
June	2,116,422	22,974,258	5,017,000	3,572,865	5,951,077	13,662,818
July	2,100,807	25,092,921	5,525,331	4,238,279	6,479,759	15,130,083
August	2,117,586	26,782,915	6,414,835	4,836,737	7,157,164	15,676,653
September	2,204,071	25,165,359	5,943,561	3,855,819	6,077,299	13,887,484
October	2,263,423	24,724,198	6,452,381	3,379,114	7,037,776	12,780,745
November	2,264,195	21,439,438	6,574,480	2,564,875	7,010,500	10,812,787
December	2,252,502	18,535,288	6,018,996	1,547,487	7,069,547	9,993,230
Total	24,361,538	247,120,174	61,563,240	30,626,489	74,106,594	143,090,956

than summer 1924 Inspection figures follow:

Jan.	11,087,604	Feb.	9,631,773
Mar.	10,084,905	Apr.	10,050,322
May	10,368,365	June	9,465,111
July	9,538,703	Aug.	9,771,382
Sept.	9,753,312	Oct.	10,455,663
Nov.	12,050,580	Dec.	13,777,570

This gives a total of 126,035,290 gallons under inspection but tax returns show a consumption in automobiles amounting to only 121,955,901 gallons. But the table reveals how distributors were stocking up in November and December for the heavy retail trade that starts immediately after the Christmas holidays.

Table No. 1 gives an idea of how gasoline consumption is distributed over the year in various parts of the country.

In Arizona, there is an unusually even distribution. The slackening in demand comes during the rainy season and the months of greatest consumption are October, November and December. In Indiana the peak of the consuming season is in August with July and September consumption almost as great as that of August.

November was the best month in Mississippi and March and May were the low months. In New Hampshire where winters are severe, the January, February and March consumption is almost negligible. The peak was reached in August and consumption in that month last year was more than 10 times the February consumption. From August consumption gradually declined and receded abruptly in January during which month and succeeding two months heavy snows cover the grounds.

January and February consumption in South Carolina was slightly lower than in other months. The peak for the year was in August but October, November and December consumption was almost as great as August. The November total was less than the August total but daily average was a little larger. Consumption in September was slightly below the other late months mentioned.

August was also the best month for consumption in Washington, with July almost as good. In May, June and September, consumption was at a slightly lower rate. January was the worst month of the year in the northwest corner of the United States.

Monthly figures are not available for California but last year consumption in the third quarter—July, August and September—was 198,498,773 gallons and the second quarter 188,516,809 gallons. Fourth quarter consumption was next with 176,666,049 gallons and the first quarter was the poorest with 165,420,-

Table No 2

1924 Gasoline Tax Receipts; Gallonage Taxed; Per Car Average Consumption; Auto Registrations

State	Tax Per Gallon	Tax Receipts	Gallons Taxed	Average Auto Registrations During Year	Total Auto Registrations Dec. 31, 1924	1924 Aver. Consump. Per Car	1923 Aver. Consump. Per Car
Alabama	2	$ 1,608,929.72	80,446,486	141,952	157,262	566.7	604.3
Arizona (a)	3	730,846.13	24,361,536	53,285	57,828	457.2	503.2
Arkansas	4	2,202,011.21	55,050,280	126,965	141,983	433.6	468.8
California (a)	2	13,068,168.15	653,408,407½	1,210,881	1,321,480	539.6	543.6
Colorado	2	1,725,957.23	92,672,401	201,301	213,247	460.3	417.9
Connecticut (b)	1	978,283.39	97,828,339	186,124	214,318	525.6	547.2
Delaware	2	304,392.47	15,219,623½	32,556	35,136	467.4	539.5
Dist. of Columbia (c)	2	544,060.25	27,203,012½	(f) 83,563	91,726	(f)488.2	.....
Florida	3	3,658,677.05	121,955,901	177,098	194,196	688.0	676.9
Georgia	3	3,361,400.69	112,046,689½	191,547	209,300	584.9	603.0
Idaho	2	545,672.28	27,282,614	65,802	69,225	414.6	374.0
Indiana	2	4,925,371.92	246,468,596	616,780	650,219	399.6	369.1
Kentucky (b)	1 and 3	761,829.76	76,182,976	215,065	231,784	354.2	332.7
Louisiana	2	1,337,447.98	97,574,992	158,250	178,000	616.5	578.5
Maine (b)	1	451,307.30	45,130,730	117,893	127,178	382.8	.....
Maryland	2	1,588,421.89	79,421,094½	202,759	195,581	391.7	366.2
Mississippi	1 and 3	1,564,770.82	61,563,240	119,473	134,547	515.3	544.9
Montana (b)	2	554,480.04	27,224,002	76,761	79,695	354.6	348.7
Nevada	2	162,596.43	8,129,821	17,043	18,387	477.0	426.5
New Hampshire	2	612,529.78	30,626,489	65,750	71,929	465.8	.....
New Mexico (d)	1	194,983.15	18,700,459	36,743	41,750	508.9	534.3
North Carolina (b)	3	3,979,855.40	132,661,846	276,684	305,736	479.4	522.4
North Dakota	1	442,967.00	44,296,700	113,152	117,061	391.4	393.5
Oklahoma	2½	3,187,035.04	146,658,364	324,991	342,982	451.2	432.8
Oregon	3	2,672,483.09	89,657,439	179,520	192,629	499.4	509.4
Pennsylvania	2	9,089,539.88	454,476,994	1,146,605	1,228,586	396.3	385.3
South Carolina	3	2,223,197.82	74,106,594	146,019	163,382	507.5	506.1
South Dakota (b)	2	820,466.39	41,023,319	137,000	142,280	299.4	428.5
Tennessee (b)	2	1,548,466.91	77,423,345	189,022	204,680	409.6	524.8
Texas (e)	1	3,336,675.27	333,667,527	761,469	834,040	438.2	454.2
Utah (d)	2½	688,400.15	27,533,011	72,629	79,233	379.0	381.1
Vermont (b)	1	205,864.29	20,586,429	56,977	61,179	361.3	.....
Virginia	3	3,313,188.47	110,439,616	240,367	261,643	459.4	508.0
Washington	2	2,841,954.52	143,097,726	278,017	294,812	513.2	488.4
West Virginia (b)	2	1,038,405.25	51,920,262½	176,162	190,134	294.7	348.8
Wyoming (a)	1	203,402.37	20,340,237	42,735	43,639	476.0	475.4
Total		$76,474,019.49	3,766,387,098	8,238,940	8,896,807	457.0	.....

(a) Fiscal year ended Sept. 30.
(b) Fiscal year ended June 30.
(c) May 23, 24 to Jan. 31, 25.
(d) Fiscal year ended Nov. 30.
(e) Fiscal year ended Aug. 31.
(f) Average during latter half of 1924 when tax was effective. Per car consumption for year based on consumption data for 8 mo.

GASOLINE STATISTICS IN STATES HAVING INSPECTION ONLY

State		Gallons Inspected	Average Auto Registrations During Year	Total Auto Registrations Dec. 31, 1924	Indicated Consump. Per car 1924	Indicated Consump. Per car 1923
Kansas	.....	185,535,050	393,242	410,891	471.8	463.9
Minnesota	.....	213,463,185	475,587	502,987	448.8	452.3
Missouri	.....	231,283,600	510,509	544,635	453.0	371.1
Nebraska	.....	124,275,813	297,383	308,713	417.9	431.6

098 gallons. In the last quarter of 1923 California consumption was 160,558,931 gallons. The 1924 fourth quarter was 10.3 per cent greater.

California motorists paid in the largest amount of taxes on gasoline last year, total receipts for the fiscal year ended Sept. 30 being $13,068,168. Pennsylvania was second with $9,089,539 paid in during the calendar year. Indiana was third with $4,925,371. Other states, as shown in table No. 2, in which tax receipts exceeded $1,000,000 were: Alabama, Arkansas, Colorado, Florida, Georgia, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, Oregon, South Carolina, Texas, Virginia, Washington, and West Virginia.

The decline in average consumption per car in South Dakota is looked upon with suspicion by State Auditor E. A. Jones.

"We are of the opinion that the state has not received all the tax due," he writes. It was charged in the Independent jobbers' suit to restrain Gov. W. H. McMaster from retailing gasoline that the state station did not pay the tax into the state treasury. The total tax collected in South Dakota was $929,199.49 in the last fiscal year but of this amount $108,733.10 was refunded to gasoline purchasers upon their representation that the gasoline was not to be used in a motor vehicle on a public highway. This means that 5,436,655 gallons of gasoline were used in tractor fuel, in the cleaning and other industries in the state.

The average consumption in Kentucky picked up considerably last year as shown by the tax returns. Last year leading marketers in Kentucky aided the state in running down gasoline bootleggers who were evading payment of the tax and then selling gasoline under the price at which the legitimate marketers who were paying the tax, could sell it.

All average consumption figures in table No. 2 are based on the average number of automobiles registered in the various states during 1924 and not upon the total registrations at end of year.

A regional grouping of tax returns (See Table No. 3) shows that average consumption per car is highest on the Pacific coast and that the southern states rank second. Inspection figures for four of the larger middle western states indicate that this grouping is third although tax figures for the Rocky mountain states, including New Mexico, put figures for that region third. Tax returns from only three middle western states are to be had because in that group resistance against gasoline taxes has been greatest. Of the three states South Dakota is one and figures from there appear to be abnormally low.

Table No. 4 gives the automobile registrations in non-tax, non-inspection states, the totals for the groups and the United States.

* * * *

Table No. 3

Regional Grouping of Tax Returns

New England Group

State	Gallons Taxed	Autos Jan. 1	1924 Average Consumption
Maine	45,130,730	127,178	382.8
New Ham	30,626,489	71,929	465.8
Vermont	20,586,429	61,179	361.3
Conn	97,828,339	214,318	525.6
Total	194,171,987	474,604	444.5

Middle Atlantic Group

Penna	454,476,994	1,228,586	396.3
Delaware	15,219,623½	35,136	467.4
Maryland	79,421,094½	195,581	391.7
Dist. Col.*	27,203,012½	91,726	†488.2
Virginia	110,439,616	261,643	459.4
Total	686,760,340	1,812,672	††406.5

*Eight months' figures. †Estimated in part
††District of Columbia omitted because statistics are for less than year.

Southern Group

N. Carol	132,661,846	305,756	479.4
S. Carol	74,106,594	163,382	507.5
Georgia	112,046,689½	209,300	584.9
Florida	121,955,901	194,196	684.0
Albama	80,446,486	157,262	563.7
Miss	61,563,240	134,547	515.3
Louisiana	97,574,992	178,000	616.5
Texas	333,667,527	834,040	438.2
Okla	146,658,364	342,982	451.2
Ark	55,050,280	141,983	433.6
Total	1,215,731,919½	2,661,448	501.4

Middle West Group

Indiana	246,468,596	650,219	399.6
N. Dakota	44,296,700	117,061	391.4
S. Dakota	41,023,319	142,280	299.4
Total	331,788,615	909,560	382.7

Southwest Appalachian Group

W. Va	51,920,262½	190,134	294.7
Ky	76,182,976	231,784	354.2
Tenn	77,423,345	204,680	409.6
Total	205,526,583½	626,598	354.2

Rocky Mountain Group

Montana	27,224,002	79,695	354.6
Idaho	27,282,614	69,225	414.6
Wyoming	20,340,237	43,639	476.0
Colo	92,672,401	213,247	460.3
Utah	27,533,011	79,233	379.0
Nevada	8,129,821	18,387	477.0
N. M	18,700,459	41,750	508.9
Arizona	24,361,536	57,828	457.2
Total	246,244,081	603,004	452.7

Pacific Coast

Calif	653,408,407½	1,321,480	539.6
Oregon	89,657,439	192,629	499.4
Washington	143,097,726	294,812	513.2
Total	886,163,572	1,808,921	531.1

Middle Western States Having Inspection But No Taxes

Kansas	185,535,050	410,891	471.8
Minnesota	213,463,185	502,987	448.8
Mo	231,283,600	544,635	453.0
Neb	124,275,813	308,713	417.9
Total	754,557,648	1,767,226	455.9

Table No. 4

Automobile Registrations for 1924 in States Not Having Gasoline Taxes or Inspection

Massachusetts	672,315
Rhode Island	90,652
New York	1,412,879
New Jersey	504,190
Ohio	1,244,000
Michigan	868,587
Illinois	1,123,724
Wisconsin	525,221
Iowa	620,906
Total	7,062,474
Autos in Tax States	8,896,807
Autos in Inspection States	1,767,226
	17,726,507

Municipal Gasoline Tax Unconstitutional

CHICAGO, April 4.—What is believed to be the first judicial decision against a gasoline tax was handed down recently by Judge A. W. Walker of the circuit court of Missouri. The decision was rendered in a test case brought against the town of Moberly, Mo., by the Moberly Oil Co. The municipality a short time previously had passed an ordinance taxing gasoline 1 cent per gallon. The court decided the measure was unconstitutional. His opinion is as follows:

"The first objection is that the ordinance violates sections of the Federal Constitution providing that no law can tax any property or rights without due process, and that section which guarantees equal protection of the law.

"The question is as to the scope of the ordinance. It is an occupation tax and not a property tax. This should be borne in mind. The party that pays such a tax is paying for police and fire protection, for streets and other commodities. The Kansas City case says that such a tax may be measured by the amount of business done. The tax is a privilege for occupation of business. It is a tax for revenue.

"Another thing; the ordinance does not levy a tax on the amount of gasoline sold during the license period, but for a previous period. There is some shadow of authority for this in a case tried in St. Joseph where the city sought to collect a tax from an express company for business done during a previous year, but the question was not pressed upon that case.

"This ordinance says that the applicant must be taxed on the business he did for a period of time three months prior to the date of paying the tax; not for the license period. A tax must be on business done within a license period and not for a prior time.

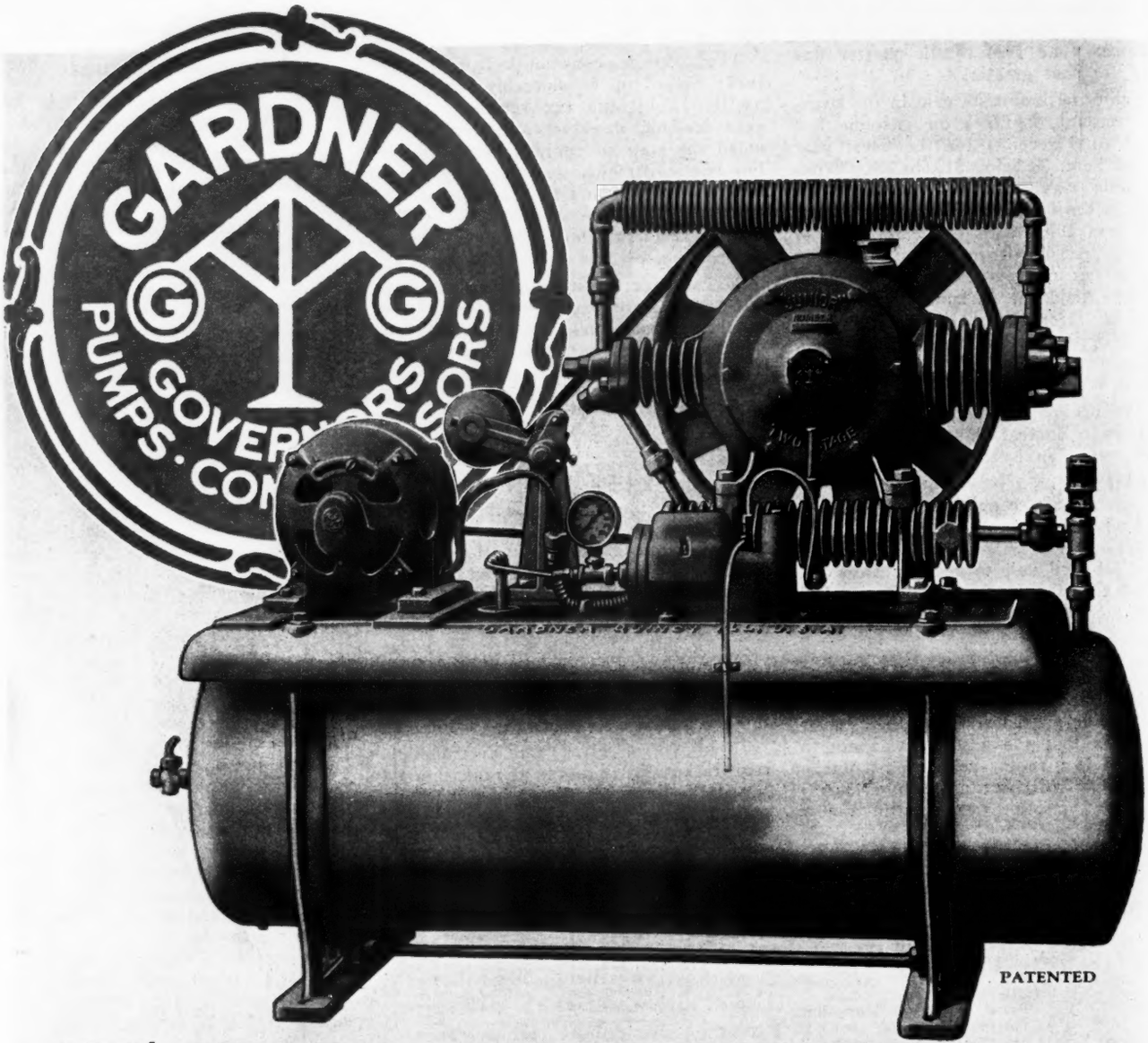
"In conclusion, it is a tax on property not occupied within the city, the license period is for a previous time and is artificial. It is unnecessary to pass on questions of the oppressiveness of the ordinance."

Austin Waldon, city attorney of the municipality of Moberly, stated at the time the decision was rendered that the case would be appealed to the supreme court of the state and that is understood already to have been done.

Opens Northwest Sales Office

TULSA, April 4.—Effective April 1, the Imperial Oil Marketing Co. opened a northwestern sales division office at Milwaukee, with John M. Mayhall in charge as sales manager. Mr. Mayhall has been in charge of the southeastern sales division for the past two years with headquarters at Little Rock, Ark.

Howard G. Ridley, assistant sales manager in the general offices at Tulsa is being transferred to Little Rock and will become assistant sales manager in the Tulsa office.



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65 years, not merely of manufacturing and selling, but of striving for mechanical perfection in *every* GARDNER product—have placed their indelible stamp of excellence on GARDNER Junior Monarch Compressors.

Sturdy, durable, possessing unique mechanical advantages, requiring a minimum of attention and using a minimum of current—the GARDNER will assure you what you are looking for—uninterrupted service and lowest possible cost for your air. Ask for bulletin.

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GARDNER

Cause of Losses in Marketing Gasoline; How to Hold Them Down

PART 1

By Paul Truesdell

N. P. N. STAFF WRITER

CLEVELAND, April 4

HERE is a question that a whole lot of jobbing companies and some of the bigger companies too, no doubt, would like to hear the answer to. The question is:

What becomes of a certain percentage of gasoline each month that appears on the invoices from the refiner but which never shows up on tank wagon tickets or filling station sales slips or cash registers or on inventory reports? With some companies this percentage is mighty small. With others it is sometimes big and sometimes small and with still others it is a perpetual problem.

Where does this gasoline go? Of course, it is a long trail from the unloading of the tank car into the storage tanks at the bulk station to the pumping of the gasoline into the gas tank of the customer's automobile at the filling station or the bucketing of it into the farmer's 50-gallon tank. There are a good many handlings and each of them offers an opportunity for loss.

There are lots of places and ways for it to get away but the question is, how does it get away for the most part and what is the cause of its loss?

Some companies blame it on evaporation loss. They look upon large "evaporation losses" as an act of God and let it go at that. Others attribute their losses some to one cause, some to another. If "eternal vigilance is the price of safety" it is also the price of keeping down gasoline losses. In other words, you have to be on your toes all the time.

Holds Loss Under Half Percent

I went to a man who is high in the marketing department of a company that operates between 300 and 400 bulk stations and nearly as many filling stations and probably around 400 or 500 trucks. Losses of gasoline has been one of the big problems this company has had to face, as all companies have. This marketing head told me that despite the size of his company's operations, their losses of gasoline during 1924 had averaged less than one half of one per cent.

I asked him how he was able to keep his company's losses down to such a low percentage and he gave me the eternal vigilance answer. When asked to what such losses are to be attributed and what are the principal points to watch between the tank car and the customer's automobile tank, he listed the causes in the following order:

1. Stealing by tank truck drivers and other employees.

2. Failure of company executives to realize the overage that occurs in storage tanks when the season is turning from winter into spring and to demand that the inventory sheets show that overage to the advantage of the company.

3. Unloading tank cars through the bottom outlet valve.

4. Carelessness of men all along the line in handling gasoline and there are many subheads under the carelessness classification.

5. Last and least, evaporation.

To take up the sources of shortage in their order of importance:

"Of course, there are many possible sources of loss through the aggregate of which big shortages are possible but it has been our experience for years that when a station consistently shows shortages it is because somebody is crooked," said this marketing executive.

"We depend largely on the law of averages in our figuring," he went on. "Carelessness may be responsible for occasional big losses at a station but they are not uniform. A careless man may be short one month but if the law of averages is allowed to work, he will be over at times as well. When consistent shortages occur it is a sign of crookedness, with few exceptions."

Most Employees Are Honest

Now the thousands of tank wagon drivers and station agents over the country undoubtedly stack up just about like a similar number of thousands of doctors or lawyers or bricklayers or book agents. Most of them are naturally honest and faithful to their jobs but there are occasional exceptions.

The tank wagon driver's or station agent's job resembles in some ways that of a teller in a bank. While the bank employee's pay is modest, he has passing through his hands every day thousands or hundreds of thousands of dollars. The temptation is enormous and every so often some teller yields to it and takes the bank's money for his own purposes. But there is a close check on the bank teller all the time and he has to exercise a great deal of ingenuity to cover up his thefts for even a short time.

The tank wagon driver or station man every day has hundreds or thousands of gallons of gasoline in his charge. This is worth real money and is readily salable. His pay, too, is modest and the nature of the work is such that very high pay for the tank wagon driver is out of the question.

It is not as hard for him to get away with stealing as it is with the bank teller because everybody recognizes that gasoline is a tricky commodity to handle. Everybody knows that it is subject to some evaporation loss and while comparatively few know just how much evaporation loss to expect in a given amount of handling and transportation under given conditions, they do not know how small leeway the agent or tank wagon driver should have on this point.

So it is not strange that an occasional tank wagon driver or station agent or filling station man yields to the temptation to make a little easy money for himself by selling five or 10 or 20 gallons of gasoline from his truck every day and putting the money in his pocket.

Evaporation Covers Many Sins

He blames his shortage on "evaporation loss" or spilling and just to the extent that his employer or his immediate boss is ignorant of the facts, is he able to get away with it. An honest driver or station man will sometimes be short and he may be short a good deal through spilling or something of that kind but he will not be short every trip or every day. And some days he will have an unaccountable overage.

Just as a poker player is sure to hold four aces once in a while and win the pot, while at others he will hold three tens against three kings and lose. It's the law of averages.

Evaporation loss cuts a mighty small figure in the transportation and dump-

(Continued on page 65)

In April 15th Issue

Part 2 of this article will take up the methods used by the big marketing company under discussion in reducing losses of gasoline during unloading of tank cars and in holding to the minimum the shortages that result from carelessness all along the line.

Unloading tank cars overhead instead of through the bottom outlet valve has been found by this company a much more satisfactory method from the standpoint of reducing losses.

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Such an unprecedented guaranty comes after long experimenting by St. Louis Pump engineers and leading efficiency experts. Careful proving for three years brought out fact for fact—the new X-RAY Plan Pump was a revelation! So good was its every test that a guaranty could be given to meet its claims. Something never before known in the history of the industry, *this guarantee to outsell!*

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Look to the X-RAY Plan book for outlined details which you can apply more specifically. It will open up the road to new possibilities never dreamed of. If greater profits interest you, then here is the one big opportunity you have been waiting for. There is no substitute for X-RAY PLAN PUMP.

X-RAY PLAN is a licensed (patented and copyrighted) feature especially designed for use with the new X-RAY PUMP. This Plan is furnished at no price increase.

(Continued from page 61)

ing of a truck load of gasoline from the bulk to the filling station or even on country routes where it is peddled from farm to farm and bucketed into small containers, at least that is the experience of the company which the marketer who is quoted represents.

How do they go to work to stop these losses?

In the first place, when a bulk station consistently shows a shortage, all the piping is examined for leaks. One of the chief reasons in favor of having all piping at a bulk station above ground is that it is easy to spot leaks and repair them. In cases where the lines are buried, they are dug up and examined. Quite often a leak is found and repairing the leak puts an end to the shortages. A whole lot of gasoline or kerosene either can be lost through a hidden leak in a pipe.

Where no leaks are found, the agent is usually transferred or put on some other work for a couple of weeks and another man is put in charge of the station. If this man runs along keeping his inventory even within reasonable limits, this is taken as conclusive proof that the first man was getting away with the stuff and he is got rid of.

At many small stations where there is only one man to take care of the station, load the tank truck and drive the truck, responsiblity of course, is centered in him. In stations where there are two men, one is always responsible for checking the loading of the trucks and also for checking the drivers when they come in from their routes.

This latter has been found by this company to be a valuable aid in keeping constant supervision on the drivers. In big stations where there are a number of drivers, it is the full time job of one man, a sort of auditor, to check the drivers when they come in from their trips. The driver turns in his money and his tank wagon tickets to the auditor and the compartments of his truck are gaged, provided he brings back any of his load.

Balancing Every Trip

If all compartments are empty, of course, the sum of money and the tickets he turns in should balance with the gallons of gasoline he took out, within a small tolerance. If there is any gasoline and oil left in the compartments the sum of these, plus the money and tickets should balance the load taken out. This marketer says his company is very fair in checking the drivers and does not attempt to hold them within impossible limits, allowing them say three or four gallons to a load leeway.

Honest drivers find this check on every trip works greatly to their advantage because many times, in checking over their trip while it is fresh in their minds, they are able to remember a five-gallon or 10-gallon delivery or perhaps even larger one for which they forgot to make out a ticket and collect the money. Then they can get right after the customer who did not pay and thus balance their account and save themselves from loss.

In at least one instance, this trip check in all probability saved some lives and the company from a damage suit. One driver came in with his gasoline five gallons short and his kerosene five gallons over. This led the auditor at once to question whether the driver had not delivered gasoline by mistake at some stop instead of kerosene. With his memory refreshed the driver recalled that he had done that very thing and where he had done it.

A special car was sent out a-flying and the gasoline removed from the kerosene tank before anybody had a chance to put it in the evening lamps and start a bad fire.

As corroborating the belief of this marketer that most of the big and consistent shortages are due to crookedness, it is pointed out that there is almost never a shortage in the kerosene inventory. Of course, kerosene does not bring as a rule half the price of gasoline and being more stable, no one would try to cover up a shortage under the cloak of "evaporation loss."

Evaporation Loss Almost Nil

In ordinary handling between bulk station and filling station there is not much more evaporation loss with gasoline than there is with kerosene. While evaporation loss is a serious problem to the oil industry at many points, the idea of big losses in handling it in ordinary truck hauls is mostly bunk.

Now to take the second cause of inventory shortage, as cited by this experienced marketer, failure of the company executives to reckon on and demand the overage in storage that comes from changing seasons. If the men in charge of operations do not recognize this, it gives the station men a chance to do a little sharpshooting for their own benefit.

Here is how this thing works out. This company takes as a basis for figuring that gasoline shows an increase of one per cent by volume for every 20 degrees rise in temperature with 60 F. taken as normal, and that is the basis of figuring generally accepted by the industry. That means that 100 gallons of gasoline when the temperature is 60 F. will be 101 gallons of gasoline when the temperature is 80 F. The rule works both ways of course, so that 100 gallons at 60 F. would be only 99 gallons at 40 F.

Take a bulk station where there are two 20,000-gallon storage tanks for gasoline. Suppose that 35,000 gallons were delivered into the tanks in March when the temperature ranged around 30 F. Suppose 15,000 gallons were sold during March. Suppose on April 1 when inventory was taken the temperature was 60 F.

With some companies, a smart station man could turn in the cash representing the 15,000 gallons sold and report his gallonage on hand as 20,000 gallons and get away with it. In fact this is being done every day. However, this marketing company we are talking about is wise to this wrinkle. The men in charge of stations know that figuring one per cent of increase in volume of the gasoline for every temperature rise of 20 degrees, the 20,000 gallons put in at 30 F. in March actually amounts to 20,300 gallons at. 60 F. in April.

A Big Source of Loss

If the station agent is able to sell this extra 300 gallons and put the proceeds in his pocket, it makes quite a good thing for him—and quite a loss for the company that employs him.

And it is a comparatively small station that carries only 20,000 gallons of gasoline on hand. It is easy to see that at a big bulk station where there are 50,000 or 100,000 gallons on hand all the time, the loss the company might suffer through this sharpshooting would run into considerable figures.

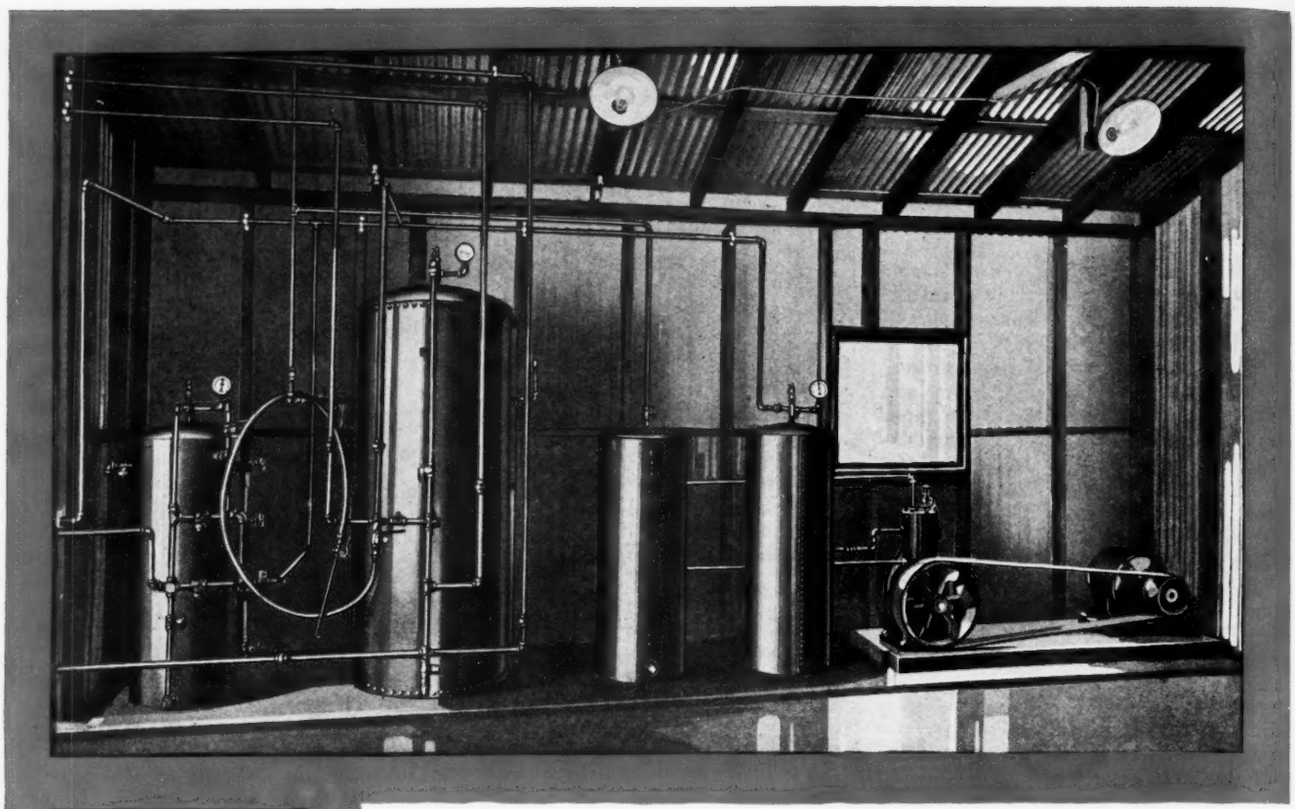
When the season is turning from summer into fall and from fall into winter, the situation is reversed. The volume of gasoline put into the tanks in hot weather will be actually less by the same proportion when the tank is gaged in cold weather.

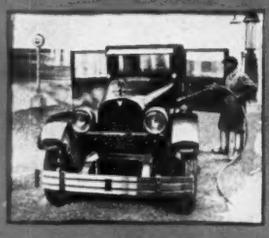
But it is a long time from spring till fall and when the agent attributes his shortage in the fall to shrinkage due to the lower temperature in case he is called to account for it, he generally gets away with it because it is recognized that it is true. By the time he makes this claim, however, it may be that the man directly in charge of such matters has forgotten that the company did not get credit for the increase in gasoline volume due to rising temperatures in the spring.

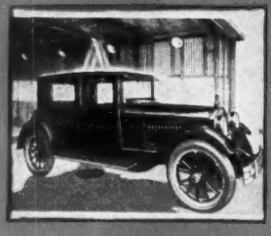
In other words, many times a sharpshooting agent can make the company carry the loss in the fall while he himself takes the benefit of the increase in the spring. Of course, constant drawing on the tanks during a month and constantly replenishing them makes it impossible to figure either the gain or loss due to temperature changes to a hair, but careful attention, such as is paid to the problem by the company under discussion, can hit it amazingly closely. In fact, their experience is, calling upon the law of averages again, that by considering the change in volume both ways, they break just about even, the loss in the fall being offset by the increase in the spring.

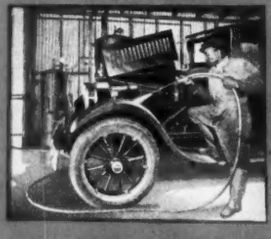
In order to check this factor of expansion and contraction, the jobbing company could require the agent to report the temperature prevailing at the time each car was unloaded during the month and could average them and take the average as the temperature of unloading, to be compared with the temperature on the day of gaging. Or the average temperature for the month could be obtained from the nearest station of the U. S. weather bureau.

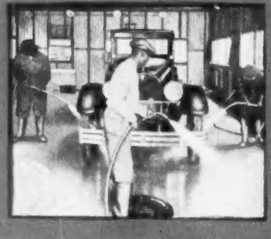
Losses at filling stations are of comparatively little importance alongside the big losses that may occur at bulk stations and in truck deliveries, though very often the filling station salesman is gypped by the truck driver giving him short measure. When this happens it











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It is "fool-proof," cuts out the waste incident to "make-shift" devices, and returns greater profits for the investment than any other business in the automotive field; and the investment is the smallest to establish a paying business from the start. Needs no Mechanical Experience to Install or Operate.

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Auto-Laundry System Co., 5758 Delmar Blvd., St. Louis

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is the filling station man's own fault, at least with this company, because he is instructed not to receipt for a load or a compartment unless he has looked at the compartment or the tank, or gaged it if necessary, and satisfied himself that it contains the amount of gasoline he is receipting. He should look into the tank or compartment too after it has been unloaded to make sure that the full contents of the compartment have been drained into his underground tank.

Many times the filling station man is charged up with a loss because the driveway where the truck unloads is on a slant and it is impossible for all the gasoline to reach the unloading line and drain out. There may be easily two or three gallons remaining in the tank in this way after the unloading is complete.

Of course, there is the problem of the filling station man short measuring his customers, which all oil companies have to be on their guard against all the time but this does not figure in losses in stock.

California Gasoline Output Falls Off; Stocks Gain

SAN FRANCISCO, April 2.—Gasoline production in California during February decreased 5,722,146 gallons to 116,416,443 gallons under January, which is a daily average of 4,157,730 gallons during February, according to statistics compiled by the U. S. Bureau of Mines from reports of 42 refineries operating in February at 69.2 per cent of their capacity, and running to stills a daily average of 415,338 barrels of crude. Stocks of gasoline increased 11,479,797 gallons, amounting to 341,543,854 gallons on Feb. 28.

Kerosene production totaled 22,330,146 gallons, which is a decrease of 3,814,576 gallons under January output. Stocks at the end of February were 55,614,163 gallons, an increase of 1,576,716 gallons over January.

Production of gas and fuel oils was 332,843,442 gallons, a decrease of 52,906,603 gallons under January. Stocks on Feb. 28 were 843,232,608 gallons, a decrease of 2,602,148 gallons under January.

The output of lubricants during February was 7,802,734 gallons, a decrease of 1,987,943 gallons under January. Stocks decreased 889,982 gallons, amounting to 22,032,127 gallons on Feb. 28.

Get the habit of looking in the RefineryProducts Directory in this issue on pages 50-51. Many quickly available grades located in all parts of the country are listed.

Vertical Tanks Make This Station Appear Prim

MARYSVILLE, April 2.—Primness, convenience and conservation of space was what the Marysville Oil Products Co., sought in laying out its bulk plant here. For primness it put in a lawn to cover its present excess space. For convenience and conservation of space it used vertical tanks.

The Marysville company, which is a subsidiary of the United Oil Products Co. of Springfield, has storage facilities for 16,000 gallons of kerosene and about 84,000 gallons of gasoline.

The company uses 16,000 gallon tanks set on end. Gasoline or kerosene is pumped from tank cars into the tanks but trucks are loaded by gravity. To permit the gravity loading, the tanks were set high upon concrete walls and columns. Two reinforced concrete walls cross under the center, each tank forming the main support.

The ends of the cross walls are faced with concrete blocks made to imitate stone and between the ends of the walls are concrete block columns, thus giving the edge of each tank bottom eight supports. Two of the tanks are set well above the top of any tank truck but other four are only about six feet above the ground.

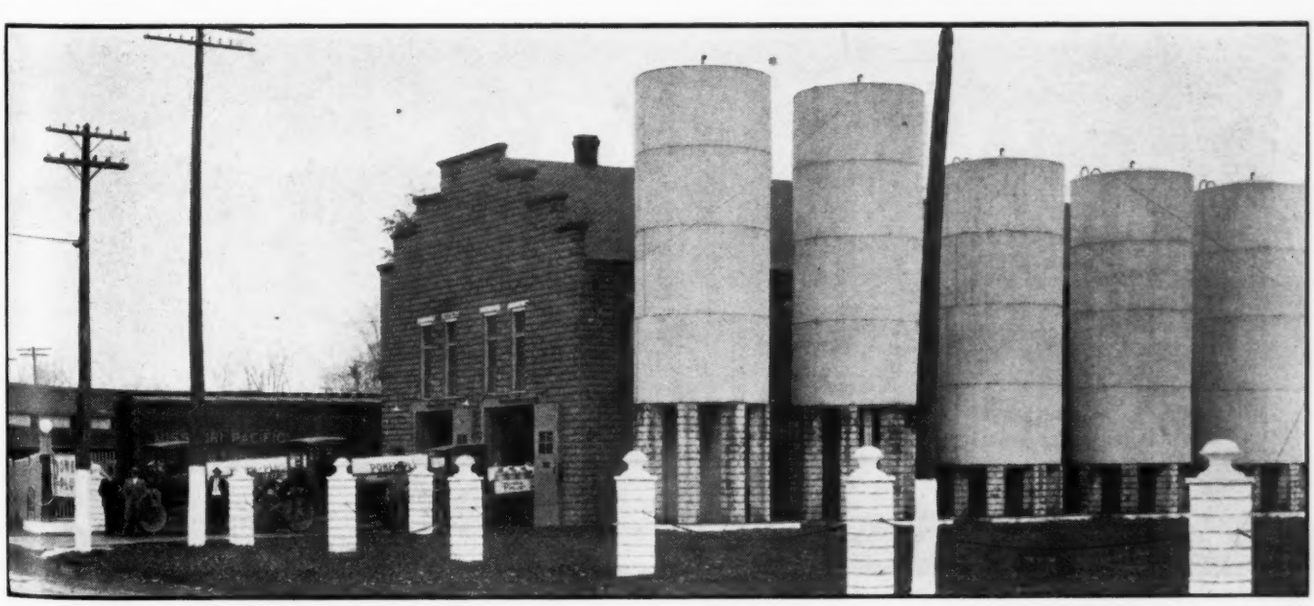
Josiah Turner, secretary and manager of the company, gives three reasons for the vertical tanks: cheaper to erect; less ground space occupied, and better appearance.

Beneath each tank is a cement platform over a heavy concrete foundation but the rest of the station grounds is in grass. Concrete block posts have been set across the front of the station lot and a log chain is stretched across instead of a fence.

Mr. Turner routes his tank trucks so that none will return with a part load. The company makes a specialty of the farmer trade but the farmer trade is something that is irregular. A farmer may want a hundred gallons of gasoline or kerosene one week and nothing the next. To prevent the hauling of gasoline and kerosene back to the home station, each truck route is so laid that it ends at one of the company's service stations in a village situated in what would be the rim of a wheel of which Marysville is the hub.

The company has five drive-in service stations, one each in Marysville, Richwood, Milford Center, West Mansfield and Plain City. It also has out under lease more than a score of pumps.

The office of the company is at the bulk station in a concrete block building 40 by 80 feet. This building also forms the garage and affords storage for 150 barrels of lubricating oils.



Bulk Plant, Marysville Oil Products Co., Marysville, O.

"Most amazing Truck Tank Facts I ever read"

That is what you will say after reading the new Little Giant circular—it shows how to increase your profits.

Your earning capacity depends largely on your Truck Tanks. A dependable delivery service every day in the year; less depreciation of the truck and tank; less wear and tear on tires; more territory coverage and more speed with safety are bound to cut down your expense.

Little Giant TRUCK TANKS

Every dollar you eliminate as expense adds that much more to your profits. That is just what Little Giant Truck Tanks are guaranteed to do.

First, Little Giant is lower in cost—from 25% to 40% lower than any other high grade truck tank. It is lighter in weight, yet it is more durable and more lasting. Little Giant carries the load properly balanced over the rear axle and it keeps the center of gravity always the same.

Yes, it's all in the construction—that is why Little Giant brings about an astonishing savings—that is why it is superior.

Our circular "N" will detail to you all the surprising profit making points of Little Giant. It is yours for the asking.

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Building A Refinery to Operate on Poor Crude and Make Money

Article 4, Cracking With Biggest Cross Battery

By Paul Truesdell

N. P. N. STAFF WRITER

BEAUMONT, TEX. April 3 WHEN the Pure Oil Engineers set to work to build the Smith's Bluff refinery in record time, of course one of the chief phases to be considered was the selection of a cracking process that would get more gasoline out of the crude. There were several processes in commercially successful use for them to choose from and they looked the field over carefully.

They picked the Cross process as the best adapted to their uses and as in the case of the fractionating equipment, they were not afraid to go ahead and bet heavily on their judgment. They built at the Smith's Bluff plant the largest battery of Cross units in the world and probably the largest cracking battery of any sort, with the exception of the Burton, to be found anywhere. This consists of 26 units.

The Cross process differed from the others in that it did not vaporize the oil to any extent where the others did vaporize the oil and carry the vapors overhead to be condensed as pressure distillate.

The Cross process was comparatively new then. The first commercial unit ever built had just demonstrated its practical success after months of running and experimenting at the plant of the Indian Refining Co. at Lawrenceville, Ill. The Cross plant at Lawrenceville was started up some time in 1921 and was described, after the bugs had been worked out of it, in the May 3, 1922 issue of National Petroleum News.

Cross Plant Construction

The plant consisted of two series of pipe coils in a furnace, a welded steel reaction chamber and that was about all.

The tubes were arranged in two banks, one above the other. The top bank was composed of the pre-heating tubes. There were 28 of these, of seamless steel tubing, 20 feet long and four-inch inside diameter, with walls half an inch thick. The ends of the tubes were fitted into specially designed return bends and projected at each end through a cast iron plate an inch and a half thick, into which they were secured with a thread, collar and nut arrangement that could be easily and quickly removed with a wrench, giving ready access to the inside of the tubes and making replacements easy.

The charging stock entering the system went first into the pre-heating tubes, circulating through them in series, reaching the end of the bank at a temperature of about 400 F. The oil then entered the lower bank of tubes which was similar in all respects to the upper or pre-heating bank.

The temperature in the furnace was held at about 1350 F. and the oil, passing out of the last tube in the lower bank was at a temperature of about 850 F. The firebox below the tubes was provided with oil and gas burners, the former for use when getting the oil up to temperature and the latter for burning the fixed gas generated in the cracking operation when the unit was well under way.

From the last tube in the hot battery, the oil, still mainly in a liquid state according to the Cross theory, passed into the reaction chamber.

Welded Steel Cylinder

This, at the Indian plant, was a welded cylinder of steel, three feet in diameter and 30 feet long with walls three inches thick. The reaction chamber was mounted horizontally on the roof of a control house. Reaction chamber and tubes were held under a pressure of from 600 to 700 pounds. The pressure

Twenty-six Cross cracking units, Smith's Bluff plant of the Pure Oil Co. The cracking furnaces are in front. Behind them can be seen the tower stills and the condenser boxes. The units are built in pairs, each stack representing one furnace.

was regulated by a relief valve in one end of the reaction chamber and this valve served also as a means for drawing off the oil after it had remained in the chamber long enough to complete the reaction. This time varied according to the stock being run but was usually about 15 minutes.

From the reaction chamber the oil, called synthetic crude because its chemical character was changed by the cracking so that it resembled natural crude oil, was run through a cooling coil to reduce its temperature to a point where it could be handled by a pump, and was then pumped into storage tanks.

Its course from then on was just about like the course taken with pressure distillate from other processes, acid-treating, rerunning and doctor treating.

One of the things that forcibly struck the Pure Oil engineers when they considered installing the Cross process was the great waste of heat involved in heating the oil up to 850 or so, then cooling it down after it left the reaction chamber, wasting that heat into the air, and then burning more fuel to heat it up to vaporizing temperature again when re-running.

Just as they had invented and developed their own method for skimming the crude, they went to work to utilize the waste heat that was involved in the operating of the cracking process as it was run at the Indian plant. They made up their minds that that heat, in properly designed equipment, could be made to carry the process a step further and distill the synthetic crude and fractionate it, taking off the pressure distillate direct in one operation.

Walter and Roy Cross had had the same idea themselves so they and the Pure Oil engineers got together. Working together, they designed the present units that are in use at the plant.

Work Out Improvements

The construction of the units at the Smith's Bluff plant do not differ much from the original plant at the Indian Refining Co.'s refinery up to the point where the synthetic crude leaves the reaction chamber, except that they are built in pairs with one control house for each two units, and in construction of the reaction chamber.

The reaction chambers used at the Smith's Bluff plant are seamless steel forgings, made exactly as forgings for big naval guns are made. The welded chamber used at the Indian plant opened up at the weld once while it was in operation. Nobody was hurt and not much damage was done aside from ruining the reaction chamber but the Cross brothers decided then and there that with pressure running as high as it runs in their process they would take no more chances with welded equipment.

The Pure Oil Co. agreed with this view and there are nothing but the steel forgings in use.

From the reaction chamber, which of course, is heavily insulated, the oil goes into a still five by 30 feet, surmounted by a tower about five feet in diameter and 20 feet high. There is no fire under the still, in fact there is not even a firebox under it. In reality it is merely an insulated tank. The pressure on the oil is released when it leaves the reaction chamber and the still and tower are under atmospheric pressure only.

Light Ends Vaporize

With the pressure, which keeps the oil in the reaction chamber in the liquid state or nearly so, released, all but the heaviest ends of the oil immediately vaporize in the still and rise into the tower. The heavier oil remains in liquid state in the bottom of the still. The same principle is here applied to the cracked oil that is applied in the crude distilling method described in an earlier article on the Pure Oil plant, with the exception that pressure is used in the cracking whereas it is not necessary to the distillation of the crude.

In the top of the tower is a spiral arrangement carrying a pipe coil through which the charging stock, cold, is pumped on its way to the cracking tubes. The low temperature of this oil condenses and knocks back the heavier fractions of the vapors, which are taken off through a line at the bottom of the tower, through a water-cooled condenser and returned to the cracking tubes as recycle stock.

The lightest vapors are taken off the top of the tower and they too pass through a water-cooled condenser, being condensed into cracked benzine.

The level of the oil in the still is governed by a liquid level control device which acts automatically. As the oil rises to a certain height, the rising float shoves down a lever, opens a valve and allows the oil to flow out. This product goes to fuel oil storage, being a marketable fuel oil ranging from 10 to 13 gravity Be. and having a remarkably low viscosity and a below zero cold test.

The incoming oil, having absorbed the surplus heat from the vapors in its spiral passage through the top of the fractionating tower, and in absorbing the heat condensed the heavy stuff, enters the cracking tubes at about 300 F., thereby greatly lightening the load on the cracking furnace and saving fuel. Each of these still and tower installations handles the oil from one double cracking unit.

Units Built in Pairs

The cracking units are arranged in a long, straight row. As before stated, they are built in pairs each cracking furnace having its own reaction chamber but one control house and one still and tower doing duty for two furnaces.

Each control house has four heavy piston reciprocating steam pumps which feed the oil into the cracking tubes at the rate of about 50 strokes to the minute. Only two of the pumps are working at one time, the extra pumps being one standby for each unit, hooked up and ready to be cut into the line instantly in case of failure of the working pumps because it would be disastrous to let the feed of the oil fail. The charging stock comes to the pumps under a pressure of about 25 pounds, this pressure being necessary to open the pump valves. The pumps are able to work against a 1200 pound pressure.

A single instrument board for each two cracking units carries the gages and indicators that give a constant index as to how the various phases of the process are going on. One gage shows the pressure which usually runs between 650 and 700 pounds. Recording pyrometers show the temperatures of the furnace, the stack and the charging stock. Another pyrometer shows the temperature at the top of the fractionating tower.

Seamless steel tubing is used throughout the cracking unit equipment and the valves and fittings are all of forged steel. The reaction chambers are fitted with flanged heads bolted on and easily removable for cleaning out operations.

The length of run between cleanouts averages about eight days and the time the units must be shut down for cleaning varies widely, the range being from eight to as much as 20 hours. The nature of the carbon deposit in the reaction chamber also varies widely. This variation would be expected when two different cracking stocks are used, as both gas oil and a lighter product, really a kerosene distillate, are cracked at the Pure Oil plant according to the state of the market.

However, the nature and extent of the carbon deposit, for some reason which has not been found out, varies from run to run when the same charging stock is used for instance, when running on kerosene distillate the deposit may be very heavy, nearly filling the

New Stuff

ARTICLE 5, the last of the series of the Pure Oil plant at Smith's Bluff, Tex., will appear in the issue of April 15.

It will describe equipment, some of it brand new to the refining industry, that is in use at the refinery.

The new equipment includes specially designed hot oil pumps, variable speed motorized pumps and various other features that are different from the ordinary equipment used in most refineries.

Also modern and thoughtful features in the design and construction of the various pieces of equipment and their adjuncts in the plant.

In the April 15 issue.

chamber, and will be soft and easily removable. On another run on the same stock, the deposit will be small in bulk but hard and flinty and so tightly burned on the walls of the chamber that it takes a good deal of time and hard work to scrape it off.

And the same holds true when running on gas oil. Practically all the carbon deposit, however, is in the reaction chamber, there being comparatively little formed in the tubes because of the velocity with which the oil travels through them.

At the time the Cross units were installed at this plant there were probably not enough men in the world who understood the operation of the process, to man them. To train men for the work was one of the problems of Superintendent Vernor.

When the first Cross unit was completed, he picked a gang of likely men, strong enough in numbers to furnish complete crews, and took them to the first unit. This unit was fired up, the superintendent explaining every step in the operating system as he had previously explained the construction and principles of the process.

The men spent a day or two watching and learning. Then, leaving enough men to handle it in charge of the first unit, Superintendent Vernor took the rest to the second unit and started that up in the same way. Then he left a crew in charge of it and went on to the third, and so on until he had the whole battery in operation and a pretty well trained crew in charge of each.

As the battery is operating now, six men keep each unit going through the whole 24 hours, two men working each eight-hour shift and there are two foremen in charge of each shift.

The Cross cracking process as it is operated at the Pure Oil Plant represents the second step in its development. Since this installation was made the Cross brothers have worked out many improvements including a bubble tower and are understood now to be working on a process for treating the vapors from the tower to produce a marketable water white gasoline direct from the cracking stills.

SOUTH FALLSBURGH, N. Y.—Economy Garage & Oil Co. will put on an additional truck the first of May, which will give it a total of three. The company is equipping 10 drive-in service stations, and contemplates the installation of 150,000 gallons additional storage early this summer, according to H. P. Levine, vice president.

TULSA, OKLA.—The Kendrick Oil Co. has obtained a large fuel oil contract for 24-26 fuel oil from the American Smelting & Refining Co. plant at Omaha, Neb., and for 34-36 gas oil from the City of Omaha Gas Works, according to W. J. Ranbarger, of the Tulsa offices of the Kendrick company.

Industrial Notes

The Mullins Body & Tank Co., Milwaukee, Wis., has moved recently into a new building at 47th and Rogers Sts., in order to have more space. The new quarters is 80 x 200 feet which affords five times as much floor space as the building they formerly occupied. The plant is thoroughly modern, is equipped with concrete floor, two traveling cranes and fine heating plant. All machines are equipped with individual motors. For the oil industry the firm manufactures truck tanks. Recently the shop turned out one of the most unusual jobs in the oil distributing business for Wadhams Oil Co. of Milwaukee. It was a large compartment tank mounted on a Sterling bus chassis. The tank was done in red copper with german silver letters. It was on exhibit at the Milwaukee Automobile show in January and is in service now.

* * *

Bruce-Macbeth Engine Co., Cleveland, O., has off the press its bulletin 204, describing the improvements and design of its line of gas engines, including the watercooled gas engine which is made without water jackets, and claimed to increase efficiency and assure proper cooling of all parts at all times. A table showing fuel consumption of its gas engines at various loads is included.

* * *

Industrial Separators Co., Inc., Philadelphia, manufacturer of standard and special filtration equipment, has opened a New York office in the Woolworth Bldg. D. D. Smith is in charge.

Keller Joins Cooper in Marketing Business

Staff Special

HOUSTON, April 4.—H. R. Keller, formerly of the sales department of the Keen & Woolf Oil Co., has joined B. P. Cooper, who in the last three years has built up a large tank car marketing business for the Cooper Petroleum Co. Mr. Keller will devote most of his time to the marketing of lubricating oils, with which he has had a number of years experience. Prior to his connection with the Keen & Woolf Oil Co., Mr. Keller was with The Texas Co. in its Houston offices.

PHOENIX, ARIZ.—The Apache Oil Co., a 100-barrel plant, is the latest addition to Arizona's refineries, according to C. E. Golding, commission agent for The Texas Co., Mesa, Ariz. Crude will be shipped from California and the refined product market will be confined to Phoenix.

A unique piece of oil equipment has recently been put out by a Chicago pump manufacturer. It is spoken of as the "Home Edition" which is an expressive paradox. It is not intended for commercial service but is designed to be installed in private garages.

This new pump is put out by the Save-Gas Sales Corp., and is made to attach to a small tank or a drum and thus enable the farmer to give himself filling station service at home. Already the farmers buy from tank wagons and in most territories they buy at the tank wagon price, 2 or 3 cents under service station price.

* * *

Hammond Iron Works, Warren, Pa., manufacturer of steel tanks, has just published bulletin No. 200 devoted to its vertical storage tanks, and a special bulletin devoted to the handling and storing of fuel oil. Tables giving standard specifications for vertical tanks from 300 to 80,000 barrel capacity, and for horizontal tanks from 1602 to 24,210 gallon capacity, are included.

* * *

W. A. Jones Foundry & Machine Co., Chicago, has just developed its Lemley Model "F" friction clutch, to meet the demand for a medium and light duty clutch which can be applied to almost any machine or countershaft requiring a friction clutch. Few parts, all of which are in view and easily accessible, and of uniform pressure, are features.

* * *

Emil Greiner Co., 55 Fulton St., New York, will move on May 1 to 55 Van Dam St., New York. Frederick Kraissl, Jr., formerly assistant manager of the apparatus division of the Corning Glass Works, has become manager of the sales department of the Emil Greiner Co.

* * *

Leader Iron Works, Decatur, Ill., has published bulletins No. 500 and 600, the first being devoted to its line of truck tanks, mountings and equipment, and the other to its line of filling station equipment, including specifications and table of sizes.

* * *

Bennett Pumps Corp., Muskegon, Mich., has just put on the market the Bennett 25 pound Grease Pak, designed to facilitate the dispensing of grease to gear boxes, etc. It can easily be carried by the station attendant to the car or truck.

* * *

Novo Engine Co., Lansing, Mich., has off the press its March edition of "Novo Power," the company's monthly publication, devoted to its line of engines and other machinery used in construction work.

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No Excess of Gasoline Crude Apparent Until New Fields Come In

By Paul Wagner

N. P. N. STAFF WRITER

HOUSTON, April 4

THE contest between the "joys" and the "glooms," affecting the 1925 prosperity of the petroleum industry, hangs on a pivot of field discoveries.

If the present daily production of light crudes east of the Rocky Mountains is about maintained, or should it be lowered, the situation will favor the "joys." Should large production result from flush fields yielding gasoline crudes the "glooms" will forge ahead.

It is pointed out in this connection that prospective new light oil fields in the Mid-Continent have not been indicated with certainty, although admission is made they are possible of materialization, including such factors as flush oil at the deep pay level around the Rainbow Bend pool, in southern Kansas, and the flush potentialities of the Mabank structure in the east Texas fault zone.

If these or other prospective developments reach outstanding proportions it is considered inevitable that some recessions in light crude oil prices will come about. But until these discoveries are made, and their effect has been more clearly shown, the position is taken in the Mid-Continent and the southwest, their possibilities still represent "bets" and "hunches" rather than actualities.

An outstanding figure in the industry takes the position that the markets for raw material can be based only on actualities and that, until such time as potential fields really become effective, their influence should not be discounted.

If these fields materialize and their effect is not offset by declines elsewhere, then price recessions would logically follow. Until then, however, this executive sees no reason why recent reductions in Pennsylvania or cuts in heavy oil districts of the southwest should be followed by lower prices for Mid-Continent gasoline crudes. For the purposes of this discussion, Mid-Continent crudes are made to include the light oil grades of Texas, Louisiana, Arkansas, Oklahoma and Kansas, some consideration being given to the Salt Creek field of Wyoming.

A compilation made by this executive indicates the 1924 production of crude grading 36 degrees and above averaged 794,000 barrels daily in Oklahoma, north and central Texas. Light crude in other areas east of the Rocky Mountains was almost entirely absorbed by plants in their respective districts, such as north Louisiana and south Arkansas.

In September of last year the three producing areas more especially under consideration were yielding up a total of about 800,000 barrels of gasoline crudes daily that similar yields had increased in January to about 820,000 barrels daily and that now these fields are giving up 740,000 barrels daily of similar crudes, or 80,000 barrels less than the daily figures for January.

All other territories producing these grades of crude are either holding around normal levels, or showing nominal declines, a condition which has prevailed for a year or more. With this situation as a background, the position is taken that no flood of light oil is in sight for 1925, based on present prices, and that it will be necessary to supply raw material demand later in the year by either developing some increased gasoline crude production or by drawing on storage.

There is no denying that it would be considered a fortunate condition for the industry if draughts on overall storage stocks materialize but the point emphasized is that present light oil prices are not too high, from this executive's viewpoint nor does it appear to him that the outlook for light oil prices should be considered in a pessimistic light.

Draughts On Light Stocks

The statement is made, although definite figures are lacking as proof, that light oil stocks in Texas, Oklahoma and Kansas are probably undergoing current draughts of as much as 100,000 barrels daily. These draughts, of course, disregard heavy oil accumulations. The latter would offset draughts in the consideration of stocks generally, that is, were storage figures considered without regard to grades of crude involved.

Burbank, Powell and Salt Creek, all major sources of gasoline crudes, are now producing daily about half of what they were making early last year. Burbank and Salt Creek together are now doing about 105,000 barrels daily and Powell less than 55,000 barrels. As regards Powell, however, its loss has been offset by Wortham. The latter is now making about 70,000 to 75,000 barrels daily and probably will decline to about 50,000 barrels at the end of 90 days.

Tonkawa, a flush gasoline crude factor of 1924, is not far above its 70,000 barrels daily average for 1924 and a definite further decline for the future is indicated. The Cromwell field of Oklahoma is not expected to yield up materially increased quantities of crude, unless Wilcox sand development should prove more prolific than it has shown for in the past in central east Oklahoma.

The picture is a reasonable portrayal of the situation, the writer believes, especially if forecasts of 20 per cent greater gasoline consumption are to materialize in 1925 over 1924.

Record Consumption Forecast

Carrying this line of reasoning further and accepting as reasonable the 1925 gasoline consumption forecast of the executive mentioned here is another point for consideration: if his estimate of 260,000,000 barrels of gasoline consumption is attained in 1925 in the country as a whole, then that quantity of motor fuel cannot be manufactured out of the same quantity of light crude as was put through the refineries of the country in 1924.

Although cracking installations have been materially increased in their efficiency as compared with a few years ago, the belief is stated that they are not today in shape to provide the amount of motor fuel required for 1925 if 260,000,000 barrels of material are consumed; hence requirements must be filled from fresh crude or storage.

The writer hastens to add as his individual thought that overall stocks amounting to almost 510,000,000 barrels of crude in the United States are large enough to make desirable some liquidation of storage and certainly the industry will profit by not adding to these inventories materially. The situation prevailing is not necessarily one calling for a gloomy outlook, in fact it has features of especial promise, but a policy of "sitting steady in the boat" is one that may be well followed by the producing industry, to bring about a stabilized future.

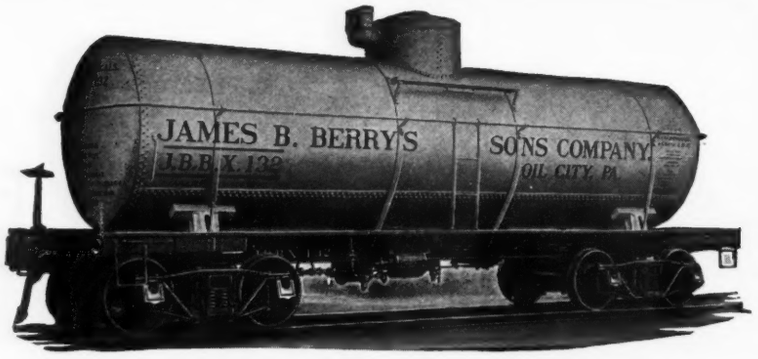
Colorado Jobbers Plan April Meeting

DENVER, COLO., April 2.—A state meeting of Colorado oil jobbers will be held sometime in April. An election of board of directors and officers will be held at the meeting. Refinery representatives and pump men will attend, and speakers will talk on general conditions and what to expect, according to W. T. Crotzer, secretary.

All oil men are invited to attend, whether they are members or not.

SCOTTSVILLE, KY.—Inter-Cities Oil Co. is installing two new 100 barrel stills, and one 200 barrel agitator, and is extending its lines into Allen county fields. The company is now receiving five times more crude than during the same period of 1924, which is a very good indication for the advancement of the field, according to E. R. Wyant, of the Inter-Cities.

SANDY HOOK, KY.—Monroe & Duff are moving their equipment on the Sandy Hook anticline preparatory to drilling a deep test, according to Henry Dickason, operator in Elliott county, Ky.



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(Continued on next page)

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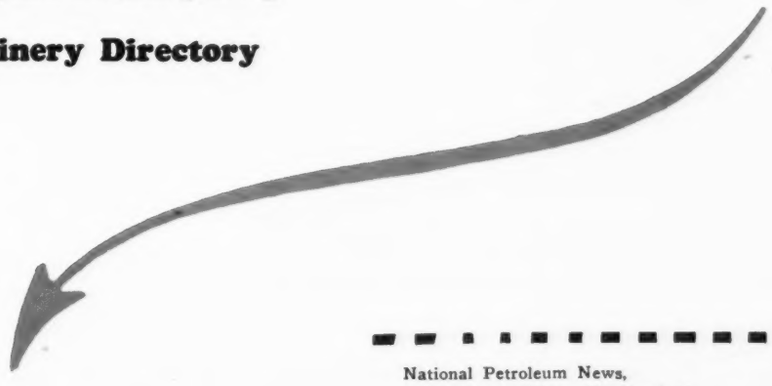

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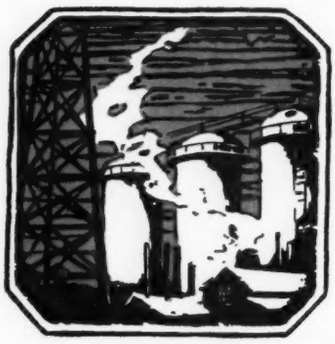

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Toyah Basin Region of Texas Related to Developed New Mexico Area

By Paul Wagner
N. P. N. STAFF WRITER

Article 8 in a Series on Texas

THE presence of shallow oil in the Toyah Basin and the more recent development of a small producing field near Artesia, N. M., are responsible for the attention now being given to the petroleum possibilities of Reeves and Loving counties, Texas.

Between 500 and 800 barrels, average production, comes above ground daily in the Artesia field, which produces from approximately the 2000-foot level. The production is provisionally placed in the Chupadera formation, belonging to the Manzano group beds of Permian age, which are overlain by red Triassic shales in parts of the area.

Inferentially, the oil at Artesia and in shallow wells drilled as early as 1909, near Dayton, N. M., has migrated upward from the underlying Magdalena beds of Pennsylvanian age.

The wells at Dayton, which were drilled in secs. 25, 15 and 26-183-26E, had maximum daily production of 25 barrels daily at depths from 869 to 950 feet. One of the best Artesia wells is the recently completed No. 2 of the Twin Lakes Oil Co., in 28-185-28E, about five miles east of earlier tests. It was credited with flush production of about 500 barrels daily from the 2000-foot level.

As most of the New Mexico wells are in areas of sand covered plains, little information has been available as regards structural conditions. The failure of test operations at Dayton to assume importance may have been due to unfavorable structure or to the limited extent of oil bearing sands.

* * * * * * *

More favorable but unmeasured conditions, in similar ratio, may account for the successful development now under way in the area around Artesia, which is only a short distance northwesterly from Dayton. It has been suggested by N. H. Darton of the United States Geological Survey, Bulletin 726, that in testing for oil in this region "it is desirable not only to penetrate all the beds of the Chupadera formation, but if no oil is found to sink through the Abo sandstone into the sandstones of the Magdalena group; unfortunately, however, the Magdalena beds lie at a depth approaching 5000 feet, which will make the cost of test wells rather too high unless favorable structure can be found."

It is intended here to discuss the petroleum possibilities of the Toyah Basin in Texas, especially Reeves and Loving counties, rather than to analyze the outlook for southeastern New Mexico. The basin in which Dayton and Artesia oil has been found, however, is the same as that extending southeasterly into the Texas counties mentioned.

From Artesia southward to the area of small oil production in northern Reeves county, Texas, is a distance of no more than 100 miles and, broadly, physiographic and geologic conditions are similar. Hence, the use of Artesia development as a "key" for the study of Loving and Reeves counties, where oil and gas have been as yet found only in non-commercial quantities.

First Toyah Development

Oil was first found in the Toyah Basin region of Texas in 1903, when a man named Lederman got a showing of 24 Be. gravity crude at 195 feet in a test well. About 20 wells were drilled, 17 of them getting small quantities of oil.

In 1911, The Texas Co. drilled three deep wells in the Toyah Basin, none of which found oil in commercial quantities. They were in secs. 17 and 18, block 59, school lands, 15 miles northwest of the town of Toyah. One of these tests had gas at 1050-1060 feet, in sandstone.

Gas was also found at 1810-1815 feet in gypsum rock and sandstone, after which the hole filled up with oil. Hard sandstone was found at 2005 feet without showings of either oil and gas. Drilling was under way as late as 1913, but nothing additional came of it.

The shows found in The Texas Co. tests undoubtedly were in Permian beds, probably in the upper half of the stratigraphic section and above the Capitan limestone. The latter is the uppermost member of the formation correlating in this region with the Chupadera beds of New Mexico The lowermost Permian in this part of Texas is known as the Delaware Mountain formation, which is provisionally correlated with the bottom part of the Chupadera; this correlation, however, is in dispute.

Oil in Lower Permian Beds

An old well in sec. 80, block 1, W. & N. W. survey, Loving county, which was good for about 40 barrels of 39.5 gravity oil daily, found the pay in a black sandy shale and black lime at 4090-4270 feet. This test, known as the old Toyah-Bell well, is considered to have penetrated about 10 feet of pay in the Delaware Mountain formation. This formation is underlain by the Hueco limestone of Pennsylvanian age, from which source the oil is believed to have come.

The Toyah-Bell well is located roughly 24 miles north of the town of Pecos in a region where no surface structure is observable and where no outcrops are present. In some quarters, the well is believed to be located on a fault from the sub-surface, which assumption is, however, not substantiated.

Total depth of 4485 feet was reached in the Toyah-Bell test, which caused a lot of excitement in 1921, chiefly in promotion circles. High prices were paid for acreage about that time, but no important results from drilling are of record. The 5-inch casing parted at 3030 feet more than two years ago, while work on the test was still under way, and the well has been the scene of intermittent fishing jobs ever since.

Hole Full of Junk

After the casing had parted, the crew took hold of it with a bulldog spear but lost both the spear and jars in the hole. Afterwards they ran in with casing bowl and lost the bell off the bowl. This much material is known to be in the hole, there may be other things. As late as a few months ago, a light joint of 6-inch casing, split at the end, was being run in for the purpose of rasping and milling down below. No definite results were, however, obtained by this work.

The test and surrounding acreage now is owned by the Ramsay Oil Co., which is said to have made a deal with a Dr. Wichman of California, who was given a small interest in the well and nearby acreage for financing the efforts to clean out the hole.

A mile west of the Toyah-Bell well, in sec. 82, block 1, Wallace Lee and others of Chicago, operating as the P. V. Oil Co., on the Wheat land, were last reported sidetracking bit below 700 feet. These interests have about 4000 acres under lease.

In Reeves county, which adjoins Loving on the west, two tests are under

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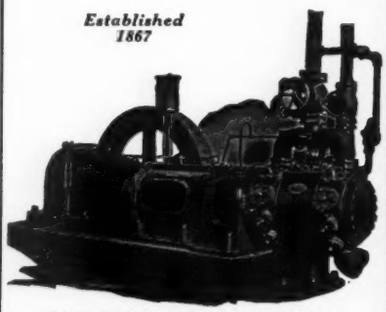

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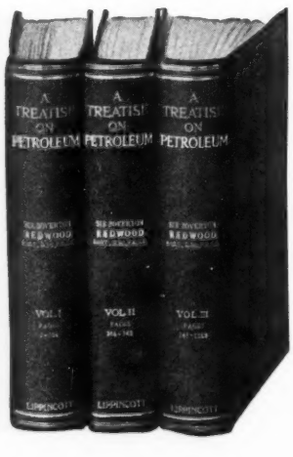

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way or contemplated. These are the Dome Drilling Co.'s No. 1 Bell, in block 2, Houston & Great Northern Railway grant, drilling below 800 feet; and the Trans-Pecos Oil Co.'s No. 1 Harnshenson, block 13, Texas and Pacific Railway survey, which has rig standing.

Tests in the Trans-Pecos region will have to be located mainly without geological advice because of the surfacing in nearly all areas consisting either of Permian beds or Quaternary inwash from the mountains to the west.

The general area consists of slightly rolling plain as far north as the New Mexico region discussed in connection with the Texas counties mentioned; it is arid and gravel strewn; and the water from shallow wells has a high sulphur and alkali content, which works against its utilization for drilling purposes.

There is no doubt that this region is worth further testing for the possibility of deep oil in the Pennsylvanian limestones, similarly as such a statement applies to southeastern New Mexico; but great costs will attend such operations, because of the depths to which the drill must penetrate, and oil interests will require much additional knowledge of sub-surface conditions before taking up exploratory work in an extensive way.

Wheeler, Prosecutor of Daugherty, Indicted

By Special Correspondent

WASHINGTON, April 2 — A special grand jury in the federal court for the District of Columbia has voted indictments against Senator Burton K. Wheeler, of Montana, running mate of Senator LaFollette last fall, Edward S. Booth, former solicitor (law officer) of the Interior Department and at one time a special assistant to the attorney general of the United States, and Gordon Campbell, a man interested in prospecting for oil, whose residence has been in Montana.

They are accused of conspiring to defraud the United States out of the use and possession of 10,000 acres of land in Toole county, Mont., which are subject to entry for prospecting permits for oil and gas under the national leasing law of 1920. They are accused of having entered and carried on the conspiracy with James A. MacGowan, who because he gave the grand jury testimony, but did not waive immunity, was not indicted. Having been a witness for the government he could not be accused of the crime imputed to his alleged fellow conspirators.

The indictment, covering 29 typewritten pages accuses Campbell of conspiring to procure various citizens of the United States to make application for prospecting permits, under agreement that the persons so procured to apply for permits would act solely for the benefit of Campbell, although they could not obtain permits except for prospecting work to be done for their own benefit. The dummy applicants were said to have signed the permits in blank and delivered them to Campbell who was to hold them for the benefit of the alleged conspirators.

By this deceitful and fraudulent device it is alleged the conspirators obtained possession of 9000 acres more than either or all of them were entitled to receive.

Senator Wheeler, after his election it was alleged was to use his influence as a senator, at the department of the interior in behalf of the applications. Solicitor Booth was to use his influence to procure the permits without disclosing personal interest in the matter, says the indictment.

Further to assure the success of the conspiracy, it was charged, the accused were to offer and promise to Francis M. Goodwin, who, in the period named in the indictment was an assistant secretary of the interior department, an interest in a part of the land covered by the permits, in order to influence his action toward approval of the applications for the permits.

This indictment is distinct from the one voted against Wheeler while Harry M. Daugherty was attorney general. That accused him of practicing law, in effect, before the government departments while he was a senator, a statutory offense distinct from the charge of conspiracy to obtain gas and oil permits for public domain lands under the national leasing act.

Although he has not been tried before a jury on that indictment, the senate last spring exonerated him on account of what he did to further the interests, as he said, if his constituent, Mr. Campbell. The exonerating work was led by Senator Bohah who was once indicted on a like charge.

When Senator Walsh, the "prosecutor" in the Teapot Dome matter learned of the inquiry the grand jury in Washington was making into the acts of Senator Wheeler, his colleague and client, he protested mightily, suggesting that Wheeler would be "persecuted" if indicted in the national capital, far from his home and far from the witnesses he could call in his behalf. The nomination of Attorney General Stone, Daughtery's successor to be a supreme court justice was held up by the coalition and Walsh, as a member of the committee to which it had been referred, subjected Stone to an examination on the indictment that seemed to be hanging over Wheeler's head. Stone, however, convinced the senate that Wheeler was not being "persecuted" and he was confirmed as a justice of the court of last resort.

SANDY, HOOK, KY.—Campbell & Wheeler have installed a new Bessemer power on their Vess Peters lease, which is designed to take care of 16 wells, according to Henry Dickason, operator in Elliott county, Ky.

NEW OIL STATION CONSTRUCTION

Big Springs, Neb.—Jack K. Brown, formerly with the Robison Oil Co. Julesburg, Colo., is erecting service and bulk station at Big Springs, which will be operated under name of Brown & Jensen Oil Co., according to Harry I. Robison, president, Robison Service Corp., Fort Morgan, Colo.

* * *

Sterling, Colo.—Three service stations are being built here, and two more planned, all to handle Sinclair products, reports C. O. Van Sandt, agent or the Sinclair Refining Co. here.

* * *

Lincoln, Neb.—Coryell Oil Co, building service station of English type architecture in Lincoln's country club district, according to Earl L. Coryell.

* * *

Birmingham, Ala.—General Oil Corp., building two service stations on Pinson Pike, according to J. Gregory Johnston, president.

* * *

Pekin, Ill.—Clyde Merritt seeking permit for filling station at St. Mary and South 2nd. Sts.

* * *

Americus, Kan.—J. M. Elliott building service station, handling Standard Oil products.

* * *

Camden, Ark.—G. S. Purifoy and L. E. McCormick purchased lot for filling station.

* * *

Rockford, Ill.—Standard Oil Co., of Indiana purchased site for service station.

* * *

Elkhart, Ind.—Standard Oil Co. of Indiana purchased site for filling station.

* * *

New Prague, Minn.—Mickus Bros. purchased property for service station.

* * *

Pittsburg, Kan.—Thomas Craig, of Franklin, building filling station.

* * *

Ft. Scott, Kan.—Jake Drum leased property for filling station.

* * *

Weleetka, Okla.—T. W. Blackman building filling station.

* * *

Ashdown, Ark.—J. T. Caples building filling station.

* * *

Carmi, Ill.—Home Oil Co. leased lot for filling station.

* * *

Red Oak, Ia.—J. W. Elwood to build service station.

Belvidere, Ill.—A. B. James, Independent marketer, who operates three drive-in stations, is building one at Cherry Valley, Ill., and has purchased sites for two additional stations. Mr. James operates five tank trucks, and has 90,000 gallons storage.

* * *

Catlettsburg, Ky.—Great Eastern Refining Corp., building service station according to R. T. Moores, general manager at Huntington, W. Va.

* * *

Adair, Ia.—Ray Johnson purchased residence, part of which he plans to convert into filling station. He will handle Standard Oil products.

* * *

Little Rock, Ark.—W. J. Herring seeking permit for filling station at Wright Ave. and Wolfe St.

* * *

Fairfax, Okla.—Marland Refining Co. secures options on property for filling station.

* * *

McLeansboro, Ill.—Standard Oil Co. of Indiana bought property for service station.

* * *

Moline, Ill.—Standard Oil Co., of Indiana bought property for service station.

* * *

West Lebanon, Ill.—L. C. Cronkhite and William Ware building filling station.

* * *

Frederick, Okla.—J. W. Farrington, Hollister, Okla., building filling station.

* * *

Bardwell, Ky.—West Kentucky Oil Co. bought site for filling station.

* * *

Wadena, Minn.—Louis Warneka bought property for filling station.

* * *

Hamilton, Tex.—P. A. Polnick purchased lot for filling station.

* * *

Ellsworth, Kan.—Barnsdall Refining Co. building filling station.

* * *

Lewiston, Neb.—Burton Wilson plans erecting filling station.

* * *

Moline, Ill.—Julius DeBrunne to build service station.

* * *

Antigo, Wis.—John Hanousek, Jr., to build filling station.

* * *

Salina, Kan.—Bert Holmquist to build service station.

* * *

Salina, Kan.—H. C. Shade erecting filling station.

Denver, Colo.—Service stations are being or will be erected here by following companies: Denver Powerine Co., Somers Oil Co., Carlson & Steinbach, I. Lohman, and J. R. MacCormac, according to Guarantee Liquid Measure Co.

* * *

Sisterville, W. Va.—Ohio Valley Refining Co., with headquarters at St. Mary's, W. Va., building bulk plant and filling station here.

* * *

Arcadia, La.—Warren Oil Co., Inc., building service station to be completed by May 15, according to W. B. Warren, president.

* * *

Steubenville, O.—Commodore Oil & Gas Co. to build service station, according to S. H. Lashley, general manager.

* * *

Oswego, Kan.—J. F. Dean building filling station, handling Standard Oil Co. products.

* * *

Lone Oak, Tex.—Alex McMillan building service station on Lone Oak highway.

* * *

Odessa, Mo.—Ben Colvin, of Oak Grove, purchased property for filling station.

* * *

Sterling, Neb.—Mr. Weins of DeWitt, Neb. purchased corner lots for filling station.

* * *

Gainesville, Tex.—Clyde Walling and Roy Loving completing service station.

* * *

Oregon, Ill.—S. C. Shepherd purchased property for service station.

* * *

Arcadia, La.—Standard Oil Co., of Louisiana building service station.

* * *

Springfield, Ill.—Morris Ichowsky remodeling filling station.

* * *

Palmyra, Mo.—Great Lakes Oil Co. to build filling station.

* * *

Clay Center, Kan.—H. L. Clare to erect service station.

* * *

Phillips, Wis.—William Curran to build filling station.

* * *

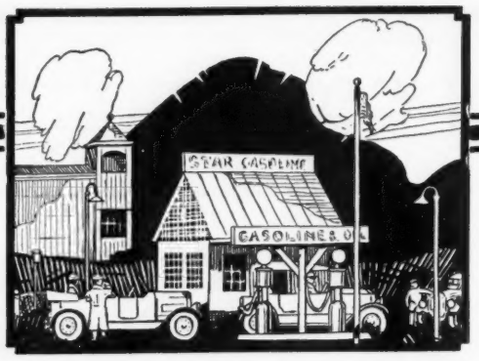
Lincoln, Ill.—Sunbeam Oil Co. building service station.

* * *

Dow City, Ia.—P. J. Brown to build service station.

* * *

Athens, Tex.—Roy Howard building filling station.



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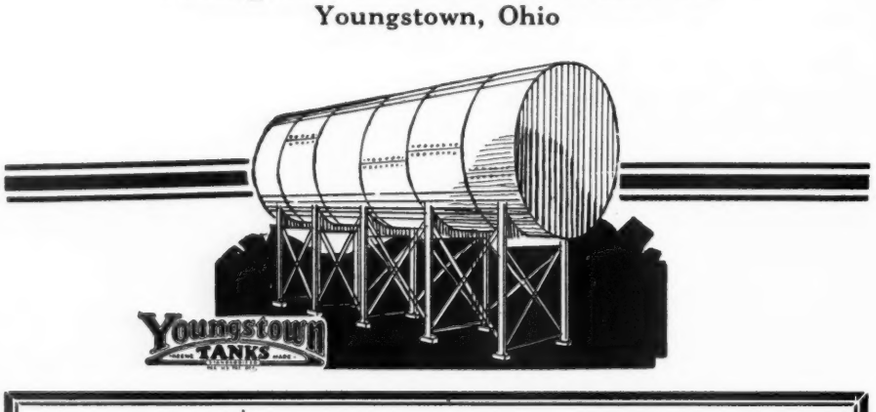

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Union Oil Buyer Resigns To Gain Golf Fame

LOS ANGELES, CAL., April 3.—Golf has proven a stronger attraction than the oil business for Earl Neitzel, buyer for the Union Oil Co. of California, who is resigning that position on April 1, in order to devote more time to the "king of sports."

Mr. Neitzel, who is prominent in golfing circles in southern California and regarded as one of the most likely championship possibilities of the younger group of golfers in this section, has been handicapped during the past several years in tournament play because of his commercial connections, according to A. C. Galbraith, manager of advertising. Besides establishing an amateur record at the Griffith City Park course, Mr. Neitzel has won several trophies in Los Angeles tournaments.

The Union maintains two golf courses, one at Brea, Orange county, and the other at Orcutt, Santa Barbara county, on which W. S. Stewart, president, R. D. Matthews, comptroller, and other officials and employes keep in practice.

Mr. Neitzel was preceded by Harvey Snodgrass, sixth ranking national tennis player, in leaving the Union to compete in national sport activity. Mr. Snodgrass left last year, having been with the Union for five years.

Other athletic material remaining at the Union offices include Roland Reinke, former doubles partner of Snodgrass, and Roy Hornidge, city ex-champion.

Col. Peck of Tulsa Dies

Tulsa, March 28.—Col. W. H. Peck, widely known oil writer, and for several years oil editor for the Tulsa World, died here today, following an attack of influenza and a complication of other ills that had kept him in bad health for several years. He lacked a few days of being 67 years of age. For the past three years he has been in retirement, having given up active duty on the World's oil desk on account of poor health. He had been in Tulsa 17 years, and before that had done newspaper work in the oil fields of Ohio, Pennsylvania and Kansas. Col. Peck was born in Oberlin, O. He is survived by his widow and three children of a former marriage. He was a member of the Masonic order and of the Congregational church.

HOUSTON.—William F. Lusch, whose Pittsburgh marketing business is conducted under the firm name of Lusch & Holbrook, in the Century Bldg., has returned home after a business trip to Houston and other southwestern points.

Doc Cook Goes to Prison

HOUSTON, April 3.—Prison doors are soon to close behind Dr. Frederick A. Cook, discredited Arctic explorer and promoter of fake stock oil companies in Texas.

Cook will leave Fort Worth this week for the federal penitentiary at Leavenworth after abandoning appeal of his case to the Supreme Court of the United States. Mandate of the United States Circuit Court of Appeals affirming his conviction and sentence for using the mails to defraud reached Fort Worth, Friday, from New Orleans.

N. P. N. Ownership Statement

Statement of the ownership, management, circulation, etc., required by the Act of Congress of August 24, 1912, of National Petroleum News, published weekly at Cleveland, Ohio, for April 1, 1925, State of Ohio, County of Cuyahoga.

Before me, a notary public in and for the State and County aforesaid, personally appeared A. W. Brobst, who, having been duly sworn according to law, deposes and says that he is the secretary of The National Petroleum Publishing Company and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 443, Postal Laws and Regulations, printed on the reverse of this form, to-wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are: Publisher The National Petroleum Publishing Company, Cleveland, Ohio; editor, Warren C. Platt, Cleveland, Ohio; managing editor, V. B. Guthrie, Cleveland, Ohio; and business managers are: None.

2. That the owners are: Warren C. Platt, Cleveland, Ohio; Bess H. Platt, Cleveland Ohio; V. B. Guthrie, Cleveland, Ohio; A. W. Brobst, Cleveland, Ohio; Wm. H. Little, Tulsa, Oklahoma.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of the total amount of bonds, mortgages, or other securities are: None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any contain not only the list of stockholders and security holders as they appear upon the books of the company, but also, in cases where the stockholder or security holder appears upon the books of the company as trustees or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds or other securities than as so stated by him.

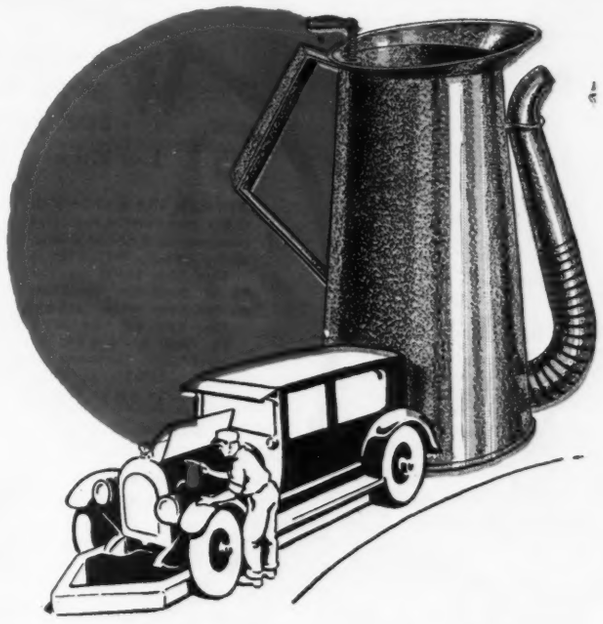
5. That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise to paid subscribers during the six months preceding the date shown above is (This information is required from daily publications only.)

(Signed) A. W. BROBST,
Secretary.

Sworn to and subscribed before me this 23rd day of March, 1925.

(Signed) H. W. SLACK,
Notary Public.

(My commission expires 1-8-26.)



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Close Figuring

ALWAYS on the spot when business was to be done, Ikey Ikenstein went "under the canopy" with Rachel Geltenberger, widow of old Joseph Geltenberger, the money-lender. After the ceremony, one of Ikey's friends congratulated him on his good fortune.

"Why, Ikey," he exclaimed, "you're going to handle about $250,000."

"Not as much as that," returned the bridegroom.

"What do you mean—not as much as that?" asked the friend. "Why, old Joseph must ha' left that, at the very least."

"Yes, but the wedding is going to cost me $25," returned Ikey, somberly.

◈ ◈ ◈

Say It In Rhyme

Drillers at work at an oil derrick in California had been stopped in their work so frequently by curious persons asking questions that one of the men dug a mock grave and painted the following epitaph on the whitewashed slab at its head.

"Here he lies
Dad burn his soul,
He wanted to
Know what was
In the hole.
He died with his
Boots on, the
Ignorant stew,
When he asked
Us this question:
"How deep are you?"

◈ ◈ ◈

Amusement

"For beating your wife, will fine you $1.10," said the judge.

"I don't object to the $1," said the prisoner, "but what is the 10 cents for?"

"That," said the judge, "is the federal tax on amusements."

—Magnolia Oil News

◈ ◈ ◈

On the Street Car

Under the leather hanging strap
The homely maiden stands,
And stands, and stands, and stands, and stands,
And stands, and stands, and stands.

—Pure Oil News

◈ ◈ ◈

No, the girls' dresses are not too short; they are just down in them too far.

—Bridgeport Driller

◈ ◈ ◈

Mother—"Is daddy asleep?"

Betty—"Yes, mother, all except his nose."

New Market for Aristo?

A certain Oregan evangelist makes a practice of painting Bible quotations and religious mottoes on rocks and fences along the public highways. On one big rock he painted these words:

"What will you do when you die?"

C. C. Colvin, Klamath Falls agent of the Union Oil Co., seeing this painted inscription got out of his auto, and painted this answer beneath the question, "Use Aristo. It resists heat."

The question now arises, will the sales department have to make provision for bulk storage at a well-known warm place, as a result of Mr. Colvin's information on the subject?

—Union Oil Bulletin

◈ ◈ ◈

Protested Oil Wells' Use

(From the Oil Well Supply Co., 25 Broadway, New York.)

When the first oil wells were sunk in the United States, a clergyman petitioned the President to stop the practice, declaring that the nation was flying in the face of Providence, which was storing the oil there in view of the future burning of the world.

—N. Y. Herald-Tribune

◈ ◈ ◈

An Honest Man, At Last!

Diogenes (meeting Supply Man)—Well, sir, whaddya know?"

S. M.—Oh, nothing much.

And Diogenes blew out his lantern and went to bed.

—Rig and Reel

◈ ◈ ◈

"I should like to open an account at this bank, if you please."

"We shall be glad to accommodate you, madam. What amount do you wish to deposit?"

"Oh I mean a charge account, such as I have at the big dry goods stores."

—Magnolia Oil News

◈ ◈ ◈

The landlady said: "My husband married me for sympathy."

"Well," gurgled a big toolie, "I'll tell the world, he's got mine."

—Bridgeport Driller

◈ ◈ ◈

Farmer—"How did ye come by that black eye, Jarge?"

Jarge—"Ole cow had a way o' flickin' me face wi' her tail, so I tied a brick onto it."

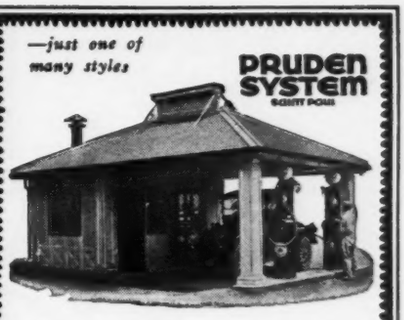
—Magnolia Oil News

◈ ◈ ◈

Customer: Where's the proprietor of this restaurant?

Waiter: He's out to lunch, Sir.

—Beacon Flash



Keeping "Overhead" low

Spells profits in the filling station business.

Using PRUDEN SYSTEM all steel buildings for your filling stations will put your overhead down to the minimum, because

1. They cost about a third as much as a brick building, giving the same service.

2. They are quickly put up, enabling you to be doing business in them long before a brick or stucco building would be erected.

Agents Wanted

Metal Shelter Co

Wabasha & Wat.. Sts.

SAINT PAUL, MINN

$1.25 EACH

HEIL VENTS for Truck Tanks

1. Saves time in unloading.
2. Prevents explosion in case of fire.
3. Saves Gasoline in case tank tips over.

Try them out. $1.25 each f. o. b. Milwaukee.

How many can we send you?

THE HEIL CO.

1238-50 26th Ave., Milwaukee, Wisconsin

Quality TANKS BODIES & HOISTS "Made by Heil"

THE Sinclair trade-mark has back of it men of recognized proficiency who understand your oil requirements thoroughly. They know how Sinclair Oils must meet your specifications scientifically. With such constantly vigilant and experienced personnel behind the Sinclair Trade Mark you are always sure of complete satisfaction with Sinclair Products. Personnel proficiency is the foundation of Sinclair success in oil operations.

SINCLAIR REFINING COMPANY
New York: Sinclair Oil Bldg., 45 Nassau St.
Chicago: 111 West Washington St.
Cable Address: "Lucent"

REFINERY-TANK WAGON MARKETS

Mid-Continent Fuel and Lubes Steady; Other Products Weaken

Staff Special
TULSA, April 4

WITH the gradual slipping of prices of most products except lubricating oils and fuel oils, and with movement from many plants on a more restricted basis, Mid-Continent refiners have closed a week of unsatisfactory conditions. Gasoline buying has been largely on a hand-to-mouth basis, and buyers were showing comparatively little interest in kerosene for either prompt or future delivery.

It will be remembered that the greatest apparent factor which prevented a crash in the gasoline market last week was the purchase of U. S. Motor by the Standard Oil Co. of Indiana. Just previous to this buying the market was tending toward lower prices, with carload marketers able to cover in some instances at 10 cents, but with the Standard's purchases at around 10¼ cents, the lower priced goods were quickly eliminated.

Now lacking the stimulus which buying by one of the large interests usually gives the market, and with most jobbers apparently committed to a policy of buying for immediate needs only, prices have resumed a downward trend. More talk of tank wagon and crude price reductions is heard among refiners this week, and the 1-cent reduction by Standard Oil Co. of Louisiana on Tuesday spread the belief that others would soon follow.

Price Cutting Starts

With an ever-widening spread between tank-wagon price and the cost of U. S. Motor at the refinery, which at some points in Standard Oil Co. of Indiana territory is around 6 cents, more opportunity is given for troublesome tank wagon price slashing. According to information reaching the Mid-Continent, price cutting has developed in some places, and to many refiners a general reduction in tank wagon prices would not come as a surprise.

Refiners are frank to state that at the present prices of crude oil they are not able to show a profit on their operations, but whether a reduction in the price of raw material would solve their problem is a matter of conjecture. To many market observers, lower crude prices mean only further lowering of refinery prices, and whether the result would place the refiner to any better advantage can not be foreseen.

During the first half of the week U. S. Motor was generally quoted to the jobbing trade for prompt shipment at 10½ cents, with many quotations at this figure for delivery over April. Trading, however, was not satisfactory to refiners, and on Wednesday, quotations of 10¼ cents began to appear. Marketers were able to purchase more freely at 10¼ cents for delivery over this month, and were offered prompt shipment at 10 cents. Some marketers offered to sell short at 10 cents for April delivery.

At the end of the week jobbers were quoted 10¼ cents more freely for prompt or future shipment, and one of the larger refiners in Oklahoma said he had committed the greater part of his April output at the new low prices. Marketers were less disposed to buy for future shipment, although they were able to cover rather freely at 10 cents, and purchases were made at 9¾ cents on Friday and Saturday.

Increase Gasoline Stocks

During the week ended March 27, the 118 Mid-Continent refiners reporting to National Petroleum News increased gasoline stocks 2,884,643 gallons to 85,060,895 gallons.

Kerosene stocks again were decreased. Stocks of gas and fuel oil in the areas as a whole remained practically stationary, but Oklahoma refiners again reduced their stocks, and in the two weeks ended March 27 they produced 26,140,367 gallons and shipped 28,974,613 gallons.

The few naphtha manufacturers reported little business in their products. Blenders have found it difficult to move their products on a slow gasoline market, and consequently have bought little raw material. The 450 end point naphthas were quoted 9½ cents upward Saturday, but refiners who were asking above 10 cents met with little or no success, except where favored with a particularly low freight rate.

High gravity gasolines remained inactive. The 60-62, 400 end point material was available at from 11½ to 11¾ cents, with scattered lots going to marketers as low as 11¼ cents. With exporters remaining out of the market, the 64-66, 375 end point grade has softened further. Buyers for domestic use displayed little interest, and while some refiners continued to move 13-cent material on contracts previously made, spot material was offered at from 12½ to 13 cents. A few refiners were quoting above 13 cents.

Naturals Move Better

Some manufacturers reported a better movement of natural gasoline this week, but shipments apparently did not keep pace with production, and prices were again lowered. Grade A was held around 9½ cents on Monday, but the market closed at 9 to 9¼ cents, with some quotations remaining at 9½ cents but with few sales at this price. Grade B closed at 8 to 8¼ cents, although the lower priced material was not freely offered. Grade C was generally quoted at 7¼ cents, although resale buyers found scattered lots at 7 cents.

Although reports from 118 refiners in the Mid-Continent indicate that kerosene stocks were reduced almost 1,000,000 gallons in the two weeks ended March 27, prices have not reflected this movement and have sagged. For prompt shipment 41-43 water white was offered at from 4 to 4¼ cents, and marketers in some cases were able to buy for delivery over the month at 4 cents. The 42-44 water white was quoted at from 4¼ to 4½ cents.

Fuel oil has moved in satisfactory volume, and prices have been well main-

(Continued on page 101)

All prices and market information printed herein have been gathered by the staff of National Petroleum News from reliable sources and so far as can be ascertained thoroughly represent the going market as defined for each product on the date given for those particular prices. Both buyers and sellers have been checked in the gathering of this information and actual sales studied.

These prices and this information are subject at all times to correction for errors. Anyone having knowledge of any facts which would indicate anything different from the information which is given, is especially urged to send in those facts to the head office of National Petroleum News at once, or take them up with the nearest representative. All such facts will be promptly and thoroughly investigated.

The staff of National Petroleum News is cognizant of the fact that this market information has come to have a high standing in the industry. It wants to not only maintain that standing, but to improve it and to that end, invites the co-operation of the entire oil industry.

JENKINS CRACKING PROCESS

Facts from performance

PRODUCES STABLE GASOLINE

■ ■ ■

Gasoline from the Jenkins Process is stable, either by itself or mixed with straight run gasoline.

During September, 1924

One 10,000 gallon tank was filled with 27 color U. S. Motor Jenkins gasoline, and

One 10,000 gallon tank was filled with 50% of this gasoline and 50% of straight run gasoline, and

On February 12, 1925

Samples from both tanks still tested 27 color.

This Jenkins gasoline was finished within the Process, except for the usual doctor treatment.

GRAVER *Founded 1857* *Corporation*

EAST CHICAGO, INDIANA

NEW YORK Grand Cent. Term. | CHICAGO Steger Building | TULSA Atlas Life Bldg. | HOUSTON West Building

Any office can give you complete information

Refinery Markets on Light Oils and Lubricants

Pennsylvania, Oklahoma, North and South Texas, Louisiana, Arkansas, California

GASOLINE AND NAPHTHA

PENNSYLVANIA	Prices Apr. 6	Prices Mar. 30	Prices Mar. 23
52-54 Naphtha	-12¾	-13¼	-13¼
54-56 Naphtha	-13	13¼-13⅜	13⅜-14
58-60 Gasoline	13¼-13⅜	13¼-13¾	13⅜-14
60-62 Straight-run gasoline	14 -14½	14¼-14¾	14⅜-15
62-64 Straight-run gasoline	14½-14¾	14¾-15¼	15 -15⅜
64-66 Straight-run gasoline	15 -15¼	15¼-15¾	15⅜-16
68-70 Straight-run gas. 350 E.P.	15¾-16	16 -16¼	16 -16⅜
68-70 Straight-run gas. 305-320 E.P.	18 -18⅛	-18⅜	-18⅜
70-72 Straight-run gas. 300-305 E.P.	19 -19⅛	-19⅜	-19⅜
OKLAHOMA			
48-50 450 E. P. naphtha	9½- 9¾	10 -10¼	10 -10¼
50-52 450 E. P. naphtha	9½- 9¾	10 -10¼	10 -10¼
56-58 450 E. P. gasoline	- 9¾	10 -10¼	10 -10¼
58-60 U.S. Motor 437 E.P. 131 i.b.p.	9¾-10¼	10¼-10⅜	10¾-10⅜
60-62 400 E. P. gasoline	11¼-11¾	11¾-12	12 -12¼
64-66 375 E. P. gasoline	12⅜-12¾	12¾-13¼	13 -13¼
68-70 350 E. P. gasoline	13 -13¼	13¼-13¾	13½-14
NORTH TEXAS			
48-52 450 E. P. naphtha	9½- 9¾	9½- 9¾	9½- 9¾
56-58 450 E. P. gasoline	9½- 9¾	9¾-10	9¾- 9⅞
58-60 450 E. P. gasoline	9⅝- 9⅞	10 -10¼	10 -10¼
58-60 U. S. Motor gasoline	9¾-10¼	10¼-10⅜	10¾-10⅜
60-62 400 E. P. gasoline	11¼-11½	11¾-12	12 -12¼
64-66 390 E. P. gasoline	12 -12¼	12⅜-12¾	12¾-13
64-66 375 E. P. gasoline	12½-12¾	12¾-13	13 -13¼
68-70 350 E. P. gasoline	12¾-13	13¼-13½	13½-13¾
NORTH LOUISIANA			
58-60 450 E. P. gasoline	10 -10¼	10¼-10⅜	10¾-11
58-60 437 U. S. Motor gasoline	10¼-10⅜	10⅜-10¾	11 -11¼
64-66 375 E. P. gasoline	13 -13¼	13¾-13⅝	-14
ARKANSAS			
58-60 450 E. P. gasoline	10 -10¼	10¼-10⅜	11¼-11⅜
58-60 U. S. Motor gasoline	10¼-10½	10⅜-10¾	11⅜-11¾
64-66 375 E. P. gasoline	13¼-13½	13¼-13⅜	13¾-14
CALIFORNIA			
54-56 U. S. Motor gasoline	-11	-11	-11
42-45 Engine distillate, 445-480 E.P.	7½- 9½	7½- 9½	7½- 9½

Note: This is without the 2-cent state tax included in the price by California refiners for shipments within the state.

NATURAL GASOLINE

OKLAHOMA			
Grade Double A	9 - 9¼	- 9⅜	9¾-10
Grade A	9 - 9¼	- 9⅜	9¾-10
Grade Double B	8 - 8¼	8 - 8⅜	8⅜- 9
Grade B	8 - 8¼	8 - 8⅜	8⅜- 9
Grade C	7 - 7¼	7¼- 7⅜	7¾- 8

NOTE—Specifications adopted by Ass'n of Nat. Gaso. Manufacturers:
Grade Double A—80-87.9 gravity, 90% recovery, not over 375 E. P.
Grade A—72-79.9 gravity, 90% recovery, not over 375 E. P.
Grade Double B—84-92 gravity, 85% recovery, not over 375 E P.
Grade B—76-83.9 gravity, 85% recovery, not over 375 E. P.
Grade C—80-90 gravity, 78% recovery, not over 375 E. P.

NORTH TEXAS			
*Grade Double A	9 - 9¼	9¼- 9⅜	9¾-10
*Grade A	9 - 9¼	9¼- 9⅜	9¾-10
*Grade Double B	8 - 8¼	8 - 8⅜	8¾- 9
*Grade B	8 - 8¼	8 - 8⅜	8⅜- 9
Grade C	7 - 7¼	7¼- 7⅜	7¾- 8

*F. O. B. Breckenridge.

CALIFORNIA			
73-78 375 E. P.	13 -13⅜	12½-13	13 -13⅜
OKLAHOMA NATURAL GASOLINE—BLENDS			
64-66 435-440 E. P.	-10	10 -10¼	10 -10¼
NORTH TEXAS			
64-66 435-440 E. P.	9¾-10	10¼-10⅜	-10
PENNSYLVANIA			
68-70 Grav. 437 E. P.	-13	13¼-13⅜	13⅜-14
64-66 Grav. 437 E. P.	-13	13¼-13⅜	13⅜-14
60-62 Grav. 437 E. P.	-13	13¼-13¾	13¾-14
68-70 Grav. 420 E. P.	-13¾	14¼-14½	14⅜-15
68-70 Grav. 400 E. P.	-14	15¼-15½	15⅜-16

BURNING OILS

PENNSYLVANIA			
45 Water White Kerosene	6⅝- 6¾	- 6⅞	- 7
46 Water White Kerosene	7¼- 7½	- 7⅜	- 7⅝
47 Water White Kerosene	- 8	8 - 8¼	8 - 8¼
300 Burning Oil	- 7¾	- 8	- 8
OKLAHOMA			
40-42 Prime White Distillate	3½- 3¾	3¾- 3⅞	3¾- 4
41-43 Water White Kerosene	4 - 4¼	4⅛- 4⅜	4¼- 4⅜
42-44 Water White Kerosene	4¼- 4½	4⅜- 4⅝	4½- 4¾
NORTH TEXAS			
41-43 Water White Kerosene	4 - 4¼	4⅛- 4⅜	4¼- 4⅜
42-44 Water White Kerosene	4¼- 4⅜	4⅜- 4½	4⅜- 4½
NORTH LOUISIANA			
41-43 Water White Kerosene	4½- 5	5 - 5¼	5 - 5¼
ARKANSAS			
41-43 Water White Kerosene	4¾- 5	5 - 5¼	5 - 5¼
42-44 Water White Kerosene	5 - 5¼	5¼- 5⅜	5¼- 5½
CALIFORNIA			
40-42 Water White Kerosene	7½- 8	7½- 8	7½ - 8

NEUTRAL OILS

PENNSYLVANIA	Prices Apr. 6	Prices Mar. 30	Prices Mar. 23
(Viscosity at 70°F.)			
220 Vis. No. 3 Assoc. Filt	27 -27½	27½-28	-28
200 Vis. No. 3 Assoc. Filt	24 -24½	24½-25	24½-25
180 Vis. No. 3 Assoc. Filt	22 -22½	22½-23	22¾-23
150 Vis. No. 3 Assoc. Filt	20 -20½	20½-21	20½-21
(Non-Viscous)			
34 Grav. 350-360 Flash	8 - 8¼	8¼- 8¼	- 8¼
36 Miners Neutrals 300-305 Flash	7½- 7¾	- 7½	- 7½
OKLAHOMA			
(Viscosity at 100°F.)			
70 Vis. No. 2½-3 color	8 - 8⅛	8 - 8⅛	8 - 8⅛
100 Vis. No. 2 color	8¾- 9	8¾- 9	8¾- 9
100 Vis. No. 2½-3 color	7½- 8⅛	7½- 8⅛	7½- 8⅛
150 Vis. No. 3 color	10¾-11	10¾-11	10¾-11
150 Vis. No. 4 color	10⅜-10¾	10⅜-10¾	10⅜-10¾
180 Vis. No. 3 color	11¾-11⅞	11¾-11⅞	11¾-11⅞
180 Vis. No. 4 color	11 -11¼	11 -11¼	11 -11¼
180 Vis. No. 5 color	10 -11	10 -11	10 -11
200 Vis. No. 3 color	11⅜-13	11⅜-13	12 -13
200 Vis. No. 4 color	12 -12⅜	12 -12¼	12 -12¼
200 Vis. No. 5 color	11 -12	11 -12	11 -12
220 Vis. No. 3 color	14⅜-15	14⅜-15	14⅜-15
220 Vis. No. 4 color	14¼-14⅜	14¼-14⅜	14⅛-14⅜
220 Vis. No. 5 color	13 -14	13 -14	13 -14
240 Vis. No. 3 color	16 -16⅜	16 -16⅜	16 -16⅜
240 Vis. No. 4 color	15⅜-16	15⅜-16	15⅜-16
240 Vis. No. 5 color	15 -15⅜	15 -15⅜	15 -15⅜
280 Vis. No. 3 color	17¾-18	17¾-18	17¾-18
280 Vis. No. 4 color	16¾-17	16¾-17	16¾-17
280 Vis. No. 5 color	15¾-16	15¾-16	15¾-16
300 Vis. No. 5-6 color	19¼-19⅛	19¼-19⅜	19¼-19⅜
GULF COASTAL			
(Viscosity at 100°F; cold test 0)			
100 Vis. No. 2 Color Unfilt. Pale	10 -10⅜	10 -10⅜	10 -10⅜
200 Vis. No. 3 Color Unfilt. Pale	14½-15	15 -15⅜	15 -15⅜
300 Vis. No. 3 Color Unfilt. Pale	17 -18	17 -18	17 -18
500 Vis. No. 3½ Color Unfilt. Pale	19 -20	19 -20	19 -20
750 Vis. No. 4 Color Unfilt. Pale	24 -24½	24 -24½	24 -24½
200 Vis. No. 5½ Color Red Oil	13 -13½	13 -13½	13 -13½
300 Vis. No. 5½ Color Red Oil	15 -15½	15 -15½	15 -15¾
500 Vis. No. 6 Color Red Oil	16½-17½	17½-18	16¾-17
750 Vis. No. 6 Color Red Oil	21 -22	22 -22½	22 -22¾
CALIFORNIA			
(Viscosity at 100°F.)			
100 Vis. No. 2 color	13½-14½	13½-14½	13½-14½
100 Vis. No. 3 color	9 -10	9 -10	9 -10
200 Vis. No. 3 color	14½-15½	14½-15½	14½-15½
300 Vis. No. 3 color	14 -16	14 -16	14 -16
450 Vis. No. 3½ color	19½-20½	19½-20½	19½-20½
550 Vis. No. 3 color	21½-22½	21½-22½	21½-22½
600 Vis. No. 3½ color	23½-24½	23½-24½	23½-24½
100 Vis. No. 5 color	8 - 9	8 - 9	8 - 9
200 Vis. No. 5 color	13½-14½	13½-14½	13½-14½
300 Vis. No. 5 color	14 -15	14 -15	14 -15
400 Vis. No. 5 color	16 -17	16 -17	16 -17
500 Vis. No. 5 color	17 -18	17 -18	17 -18
600 Vis. No. 6 color	18 -19	18 -19	18 -19
700 Vis. No. 7 color	19½-20½	19½-20½	19½-20½

CYLINDER STOCKS

OKLAHOMA			
190-200 Vis. at 210° Bright Stock	31 -36	31 -36	31 -36
150-160 Vis. at 210° Bright Stock	28 -32	28 -32	28 -32
Medium Filtered Stock	18 -24	18 -24	18 -24
600 Steam Refined Olive Green	11 -12½	11 -12½	11 -12½
600 Steam Refined Dark Green	7½-10	8 -10	8 -10
Black Oil	5¼- 5½	5¼- 5½	5¾- 5½
PENNSYLVANIA			
(1-inch Immersion Test)			
600 Steam Refined	19 -20	-20	20½-21
635 Steam Refined	-25	25 -26	26 -28
650 Steam Refined	-27	27 -28	28 -30
600 Flash	-30	30 -32	-30
600 Warren E	-25½	-25½	25½-26½
600 Oil City E	-24	-24	24¾-25¾
600 Filtered D	29 -30	29 -30	30 -32
Cold Test Stocks (bright filtered)	38 -40	38 -40	-39
Cold Test Stock (dark filtered)	36 -38	36 -38	36 -37
Black Oil	- 8	- 7¾	- 7¾

(Note—Prices of total immersion test goods average 1 to 2 cents per gallon higher.)

Above prices are f. o. b. refinery in tank car. They are the prices at which the bulk of the products on the open market move. Whoever has knowledge of any open market prices on any considerable quantity of goods differing from the foregoing, will favor us with this information.

No carbon

Increased lubrication value

Last longer—Less oil used

Will not settle out

A Handful of Reasons for

Completely eliminates brake chatter

Thin-Thick Essence

Ford Non-Chatter Compound

Waverly
"ALL PENNSYLVANIA"

PRODUCTS
Industrial Lubricants
Automotive Lubricants
Greases
Soaps
Castor Machine Oil
Waverly Spirits
Refined Paraffin Wax

FREE BOOKS

1000-Page Jobbers Handbook
Gratis to Oil Firms. Extra copies and individuals $1.00.

Industrial and Automotive Lubrication Manual and Charts
A treatise on Industrial and Automotive Lubrication and precise recommendations for the lubrication of all standard industrial machines and automobiles.
The only book of its kind in print.

Developed and approved by years of careful work in the Waverly Laboratories and by twelve months' experience in actual use in our own consuming trade and by many jobbers, 10%-12% compounded with any good Ford lubricating oil—produces an ideal non-chatter lubricant for Ford cars. Increases viscosity to a marked degree at 212°. 15%-20% compounds will increase viscosities at 212° to 100-150. Compounds can be made at normal temperatures but are better at 220°-230° F. A unique patented product beyond all competition. In a class by itself. Costs less than animal or vegetable oils.

Send for samples and prices.

Waverly Oil Works Company
5409-54TH STREET PITTSBURGH, PA.
Established 45 years

Guaranteed 100% PURE PENNSYLVANIA OIL

Member of Pennsylvania Grade Crude Oil Assn.

Guaranteed 100% PURE PENNSYLVANIA OIL

Refinery Markets on Wax and Heavy Oil Products

Pennsylvania, Oklahoma, North and South Texas, Louisiana, Arkansas, California

WAX

PENNSYLVANIA	Prices Apr. 6	Prices Mar. 30	Prices Mar. 23
	(Per Pound New York)		
122-124 White Crude Scale	4½- 4¾	- 5	5¼- 5½
124-126 White Crude Scale	- 4¾	- 5½	5¾- 5½
OKLAHOMA			
	(Per Pound Group 3)		
124-126 White Crude Scale	4¼- 4½	4½- 4½	4¾- 5
CALIFORNIA			
White Crude Scale	7½- 8	7½- 8	7½- 8

FUEL OIL

PENNSYLVANIA			
36-40 Fuel Oil	5½- 5¾	6 - 6¼	6¼- 6½
30-34 Fuel Oil	5 - 5¼	- 5¾	5¾- 6
28-30 Fuel Oil	- 5	5½- 5¾	
OKLAHOMA			
38-40 Straw distillate	3¼- 3⅜	3⅜- 3½	3⅜- 3½
36-38 Straw distillate	3¼- 3⅜	- 3½	- 3½
32-36 Gas oil	3 - 3¼	3⅜- 3½	3¼- 3¾
26-30 Fuel oil (Bbl.)	1.12½-1.15	1.15 -1.17½	1.15 -1.20
24-26 Fuel oil (Bbl.)	1.07½-1.12½	1.07½-1.12½	1.10 -1.12½
24-26 Fuel oil (Buyers' cars)	1.07½-1.12½	1.07½-1.12½	1.10 -1.12½
20-22 Fuel oil (Bbl.)	-1.05	1.05 -1.07½	1.05 -1.10
50-60 Asphaltic content road oil	1.25 -1.30		

NORTH TEXAS	Prices Apr. 6	Prices Mar. 30	Prices Mar. 23
36-40 Straw Distillate	3¼- 3½	3⅜- 3¾	3⅜- 3¾
32-36 Gas Oil (Gal.)	3½- 3¾	3¾- 3⅜	3¾- 3⅜
24-26 Fuel, per bbl	1.15-1.20	1.25-1.30	1.25-1.30
GULF COASTAL			
Fuel	2.10-2.15	2.10-2.15	2.10-2.15
Gas Oil	5½- 5¾	- 3½	5½- 5¾
NORTH LOUISIANA			
32-36 Gas Oil (Gal.)	3¼- 3½	- 3½	- 3¾
18-22 Fuel Oil (Bbl.)	1.10-1.15	-1.20	1.20-1.25
ARKANSAS			
38-40 Distillate			
32-36 Gas Oil	3¼- 3½	3½- 3¾	3¾- 4
18-22 Refinery Fuel Oil (Bbl.)	1.10-1.15	1.10-1.15	-1.25
Smackover Crude Fuel (Bbl.)	1.05-1.10	1.05-1.10	-1.10
Road Oil	- 3½		
CALIFORNIA*			
14-18 Fuel Oil (Bbl.)	1.60	1.60	1.60
14-18 Bunker Oil (Bbl.)	1.60	1.60	1.60
24-30 Gas Oil (Bbl.)	1.85	1.85	1.85
27 + Diesel Oil (Bbl.)	1.85	1.85	1.85

*Prices at southern California points. Prices at San Francisco 5c per bbl higher.

Above prices are f. o. b. refinery in tank car. They are the prices at which the bulk of the products on the open market move. Whoever has knowledge of any open market prices on any considerable quantity of goods differing from the foregoing, will favor us with this information.

(Continued from page 97)

tained. While some low gravity fuel has moved as low as $1.02½ for re-sale, refiners were asking the trade $1.05, and in some cases $1.10 for 18-22 or 20-22 gravity. Quotations to the trade on 24-26 gravity were around $1.10 to $1.12½ and 26-30 gravity was being offered at from $1.12½ to $1.15.

Road Oils

Oklahoma refiners show little interest in road oils this year. One of the larger refiners who handled considerable of this business last year, was quoting $1.26 for 60-70 asphaltic content, but indicated he would manufacture the material only as orders came in. Another, who made road oil last year, now has a railroad fuel oil contract which brings him around $1.45 per barrel on present crude prices, and unless the price of crude is reduced, thereby lowering his contract price, he will not make road oil this year.

Several other refiners indicated they would not manufacture this product this year. They appear willing to leave this business to refiners having a supply of Smackover crude. One Arkansas refiner is now quoting 3½ cents in Arkansas for all grades and reported orders now on his books totaling 750,000 barrels for shipment from April 15 to Oct. 30.

Lubricating oils continued in fair demand, and prices generally have shown little change in several weeks. Wax is easier, and prices are lower. Two refiners reported sales early in the week at 4½ cents for April shipment but re-sale buyers have purchased 124-126 white crude scale at 4¼ cents.

COLUMBUS, O.—During 1924, tank cars of the Pure Oil Co. traveled 31,597,305 miles and handled 42,766 car loads of Pure Oil products, reports C. A. Ward, editor "Pure Oil News."

Gasoline Active in Chicago Market But Prices Decline

CHICAGO, April 4

GASOLINE met a fairly active market all week, but in spite of the fact that March consumption was good and current call satisfactory, the price went off ¼ cent over the week, due to offerings in excess of jobber requirements. Practically no U. S. Motor gasoline could be had last Monday under 10½ cents and some sold above that price. Now 10¼ cents is the going price and there are rumors that this can be shaded.

There were rumors of an impending tank wagon price cut in Chicago all week, but none was made. The rumors also stated that Group 3 skimmers were paying smaller premiums for their crude oil, and in some cases none at all. If true, this is due to a stacking up of refined goods rather than of crude oil, but the small increase in Mid-Continent production in the last two weeks has had a bad effect on the morale of the oil trade in Chicago.

Certain offices in Chicago doing an extensive re-sale business report they did three times the volume of business in March as in February. In this way it may be seen that the jobbers have been buying freely enough over the month.

It is significant too, that in spite of the absence of "bootleg" crude which cut so much figure in last year's spring market, the Group 3 price of U. S. Motor gasoline now is slightly lower than it was in the early days of April, 1924. In Nebraska and South Dakota, retail prices of gasoline have been cut by dealers of limited operation.

There has been no easing in the price of kerosene. If there is any difference in conditions between now and this time last week, refined oil is in better shape at 4¼ cents a gallon for the 41-43. Some cars of 42-44 are moving to jobbers at 4½ cents. On the inferior qualities, however, it is said that 4¼ can be shaded. This situation is one naturally to be expected at a season when domestic fuel demand is falling off.

Stove distillate prices are virtually unchanged but demand at 3½ cents has not improved since last Saturday. Gas oil is still weak at 3¼ cents a gallon.

Fuel oil prices appear to have struck their downward limit, at least for the present. Refinery fuel of 24-26 gravity has not been selling under $1.05 and some business has been done at $1.10. A few Chicago dealers have sharpened their pencils to accommodate fractional calculations and quote $1.07½. Refinery fuel is no higher than crude fuels. Smackover processed material in times such as now enjoys a slight advantage in the Chicago market because its users are accustomed to it and will give it preference.

Chicago dealers have been devoting most of their attention this week to the marketing of lubricating oils. This is the season when "Pure Pennsylvania" is talked about locally, and for the most part highly recommended. The cue is to start pushing lubes when high gravity gasolines begin to weaken, and that has happened.

TULSA.—J. C. Miller, formerly sales manager for Oklahoma Producing & Refining Corp., but more recently with Kendrick Oil & Gas Co. at Tulsa, will sell lubricating oils for Cosden & Co. in Arkansas and Texas and other southwestern territory.

Gasoline is Slightly More Active in Northwest Pennsylvania

CHICAGO, April 6.—This will be a ing of gasoline was noted in the latter part of last week at northwestern Pennsylvania refineries and prices appeared stiffer than earlier when little of spot goods was moving. In the first half of the week, considerable shopping around was noticeable in all products. Prospective buyers were trying to shave down prices ¼ and ⅛ cent a gallon.

Prices of about all products are lower than a week ago but fuel oil as well as gasoline appeared firmer today. Cylinder stocks and neutrals also seem to have steadied at lower price levels than existed a week ago but new demand is considerably below refiners' hopes. It is expected that a renewal of the export demand for steam refined stocks will shortly be reflected in the Pennsylvania refinery market. Present orders are being filled from stocks at seaboard.

Wax continues to slip and while many refiners are trying to peg their price for 122-124 A.m.p. white crude scale at 4¾ cents per pound, New York, some others have yielded to buyers' offers of 4½ cents.

Kentucky

Heavy gasolines are cheaper in central Kentucky than a week ago but light grades are unchanged. Kerosene and fuel oil are unchanged. Gas oil is ¼ cent lower. Crude oil is being offered freely by producers and refiners expect a price reduction before long. Somerset crudes are the only eastern oils the prices of which have not recently been reduced.

Quotations today at central Kentucky refineries are: 58-60 gasoline, 12½ cents; 60-62, 13¼; 64-66, 14, and 68-70, 15 cents. Kerosene, 42-44 water white, 7½; 34-38 gas oil, 5, and 24-26 fuel oil, 4 cents.

All North Texas Products Quiet

WICHITA FALLS, TEX., April 4.—North Texas refinery markets have been quiet during the last week. U. S. Motor has been quoted at from 10 to 10½ cents, but must sales appear to have been made around 10 cents. On Saturday marketers were able to purchase some material at 9¾ cents. Jobbers were being offered this grade at 10 cents.

High gravity gasolines were quiet insofar as new business was concerned. One sale of 60-62, 400 end point was reported at 11¼ cents for export, and 64-66, 375 end point goods is quoted at around 12½ to 12¾ cents. One refiner offered a considerable quantity of 64-66, 375 end point gasoline of export specifications at 12¼ cents, but no business had been written at the end of the week.

Price of 450 end point gasoline has been within ¼ cent of U. S. Motor, and some refiners have been holding their 58 gravity material at the same price at which others offered their U. S. Motor. Manufacturers indicate a fair demand for natural gasoline, and Grade C ranges from 7 to 7¼ cents. Some material has been sold for delivery over the month.

Kerosene moved slowly at 4 to 4¼ cents for 41-43 water white and 4¼ to 4⅜ cents for 42-44 water white. Gas oil movement was fair at 3⅛ to 3¼ cents. A few cars for immediate shipment were purchased at 3 cents.

Fuel oil prices at Burkburnett and Wichita Falls have been identical. The low price has been $1.15, with sales as high as $1.20, but movement was only fair.

Week's Price Changes Tank Wagon Market

Gasoline Changes

Standard of Louisiana—T.w. and s.s. prices cut 1 cent, through territory, March 31.

Standard of Indiana—T.w. and s.s. advanced 1 cent in Indiana, 2 cents in Wisconsin, covering state taxes, April 1. Gasoline in South Dakota advanced 1 cent, covering tax, March 11. Gasoline at Bartlesville, Okla., advanced ½ cent, covering tax, March 25.

Standard of Nebraska—T.w. and s.s. advanced 2 cents through state, covering tax, April 1.

Continental Oil—T.w. and s.s. advanced 1½ cents in Wyoming, 1 cent in Utah, covering additional taxes, April 1. Wyoming tax has been shown incorrectly as 2½ cents since March 11 issue. Tax has been 1 cent up to April 1, and on April 1 was raised to 2½ cents. T.w. and s.s. prices, including 1 cent tax, have been 20 and 22 cents respectively at Casper, and 21.5 and 23.5 cents at Cheyenne since Feb. 16.

Magnolia Petroleum—T. w. and s.s. reduced ½ cent Ft. Smith, Ark. to 21 and 24 cents respectively; Little Rock reduced 1 cent to 21 and 23 cents respectively, both March 21.

Gulf Coastal Quieter

HOUSTON, April 6.—Gulf Coastal lubricant markets are quiet again. But the price lists shows only a few changes. It is intimated in some quarters that concessions might be made on certain grades if large orders were received. Concessions, it is said, would not apply to one car orders. Conditions are described as satisfactory and the pull is attributed to the reaction from a splurge of jobber buying during the latter half of March.

Good Weather to Stay Forecaster Says

CHICAGO, April 6.—This will be a good week for motoring so far as the weather is concerned provided, of course, the government forecaster is right. In this connection it might be said he usually is correct but his last week's prophecy was wrong. There was some cold and snow and ice in the Great Lakes region but it was scattered and freakish and interfered with the prevailing fine weather only in spots—small spots.

This week, he predicts, will be as good as last week turned out to be. Warm temperatures will prevail in that part of Standard Oil Co. Indiana territory west of Chicago, and the showers at the middle of the week will be light. The Ohio river valley will have its usual perfect spring weather (no charge for that) cool, calm sunny days until the last of the week when it will "turn off wet." In the Great Lakes region it will be cool early in the week and warm at the end, with showers occasionally.

Last month, the records show, was considerably warmer and drier as a whole than the average March with less cloudiness and more sunshine. The minimum temperature in Chicago was one degree below zero and there was no freeze after the 19th. To show the effect upon gallonage, some refinery offices in this territory report three times as much business in March as in February, and April is going strong.

Benzol Consumption

NEW YORK, April 6.—Demand for motor benzol is fully up to expectations and the leading marketers are not making any big contracts at prevailing prices. At the ovens motor benzol is quoted at 22 cents a gallon, in tank cars, while pure is held at 24 cents.

There is a heavy contract movement which is keeping spot supplies low and prices are tending higher although no actual revisions were recorded last week. Manufacturers of motor fuel mixtures who are not now covered on contract, will probably be compelled to buy hand-to-mouth for several months to come, as production, although large, is falling slowly while consumption is increasing steadily.

Export demand for motor benzol is more active, but producers are not in a position to take care of the foreign demand at present, although they claim they could secure higher prices in Europe than here. The market abroad is not considered a steady one and for this reason, domestic producers are not after export business.

New England Refinery Prices

(F. O. B. Boston and Fall River)

	Apr. 6	Mar. 30
U.S. Motor gasoline (gal.)	14¼	14¼
30-32 gas oil (gal.)	6	6¼
40-43 w. w. kerosene	7¼	7¼
Fuel Oil (Bunker C) bbl	1.92	2.00

Tank Wagon, Service Station Markets for Gasoline and Kerosene
in United States Territories and Canada

BELOW are given in cents a gallon, the tank wagon price of gasoline without the special taxes levied against motor fuels by many states, the amount of the state taxes, the total tank wagon price, with tax added in and the service station or retail price of gasoline as quoted by the Standard Oil Companies in their various marketing territories. The right hand column is the tank wagon price of kerosene. By tank wagon price is meant the price to resale agents or dealers.

These prices in Effect April 6, 1925

S. O. NEW JERSEY TERRITORY

	Gasoline T.W.	Tax	Total	S.S.	Oil T.W.
Atlantic City, N. J.	18	0	18	*	13
Newark, N. J.	18	0	18	20	13
Annapolis, Md.	19	2	21	*	12
Baltimore, Md.	18	2	20	22	11
Cumberland, Md.	19	2	21	23	12.5
Washington, D. C.	18	2	20	22	12.5
Danville, Va.	19	3	22	*	13.5
Norfolk, Va.	19	3	22	24	13.5
Richmond, Va.	19	3	22	24	13.5
Roanoke, Va.	19	3	22	24	13.5
Petersburg, Va.	19	3	22	*	13.5
Charleston, W. Va.	17	2	19	21	13.5
Clarksburg, W. Va.	18	2	20	22	13.5
Keyser, W. Va.	18	2	20	*	13.5
Parkersburg, W. Va.	17	2	19	21	13.5
Wheeling, W. Va.	17	2	19	21	13.5
Williamsburg, W. Va.	18	2	20	*	13.5
Charlotte, N. C.	19	4	23	25	14.5
Hickory, N. C.	19	4	23	*	14.5
High Point, N. C.	19	4	23	*	14.5
Mt. Airy, N. C.	19	4	23	*	14.5
Salisbury, N. C.	19	4	23	*	14.5
Charleston, S. C.	19	5	24	26	15
Columbia, S. C.	19	5	24	26	15

*Dealers set own prices. S. O. New Jersey does not operate station.

S. O. NEW YORK

*New York City	20	0	20	22	13
Albany, N. Y.	20	0	20	22	13
Buffalo, N. Y.	20	0	20	23	13
Rochester, N. Y.	†20	0	†20	†24	13
Syracuse, N. Y.	20	0	20	22	12
Boston, Mass.	20	0	20	24	11
Augusta, Me.	20	1	21	24.5	13
Manchester, N. H.	20	2	22	25.5	13
Burlington, Vt.	20	2	22	25.5	13

*In steel barrels.

†At Rochester only, as far as is known, Standard sells two grades of gasoline, the above price applying to its Socony grade, and another grade being sold 2c below this price.

ATLANTIC REFINING

Pittsburgh, Pa.	19	0	19	*24	14
Philadelphia, Pa.	19	0	19	*24	14
Allentown, Pa.	19	0	19	*24	14
Erie, Pa.	19	0	19	*24	14
Scranton, Pa.	19	0	19	*24	14
Altoona, Pa.	19	0	19	*24	14
Dover, Del.	19	2	21	24	14
Wilmington, Del.	19	2	21	24	14
Providence, R. I.	20	0	20	24	13
Springfield, Mass.	20	0	20	24	13
Worcester, Mass.	20	0	20	24	13
Hartford, Conn.	20	1	21	25	12
New Haven, Conn.	20	1	21	25	13
Boston, Mass.	20	0	20	24	11

*Contains 2-cent tax collected by retail dealer and paid by him directly to state.

S. O. KENTUCKY

Lexington, Ky.	19	3	22	25	14
Louisville, Ky.	19	3	22	24	12
Covington, Ky.	17	3	20	23	14
Clarksdale, Miss.	19	3	22	25	12
Jackson, Miss.	19	3	22	25	10
Natchez, Miss.	18.5	3	21.5	24.5	11.5
Vicksburg, Miss.	18.5	3	21.5	24.5	11.5
Birmingham, Ala.	20	2	22	25	14.5
Mobile, Ala.	19	2	21	24	12.5
Montgomery, Ala*	21	2	23	26	15.5
Atlanta, Ga.	21	3	24	27	13
Augusta, Ga.	21	3	24	27	13
Macon, Ga.	21	3	24	27	14.5
Savannah, Ga.	19	3	22	25	13
Jacksonville, Fla.	19	3	22	25	13
Miami, Fla.	21	3	24	27	14.5
Tampa, Fla.	19	3	22	25	13
Pensacola, Fla.	19	3	22	25	13.5

*Local privilege tax of 1 cent on gasoline and ½ cent on kerosene at Montgomery included.

S. O. INDIANA

	Gasoline T.W.	Tax	Total	S.S.	Oil T.W.
Chicago, Ill.	†19	0	†19	21	12
Decatur, Ill.	18.2	0	18.2	20.2	12.5
E. St. Louis, Ill.	17.1	0	17.1	19.35	11.6
Joliet, Ill.	18.4	0	18.4	20.4	12.7
Peoria, Ill.	18.2	0	18.2	20.2	12.5
Quincy, Ill.	18.2	0	18.2	20.2	12.3
Indianapolis, Ind.	18.2	3	21.2	23.2	12.7
Evansville, Ind.	18	3	21	23	12.5
South Bend, Ind.	18.4	3	21.4	23.4	12.9
Detroit, Mich.	18.8	2	20.8	22.8	13.2
Grand Rapids, Mich.	18.7	2	20.7	22.7	13.1
Saginaw, Mich.	18.9	2	20.9	22.9	13.3
Madison, Wis.	18.3	2	20.3	22.3	12.5
Milwaukee, Wis.	18.1	2	20.1	22.1	12.5
La Crosse, Wis.	19.2	2	21.2	23.2	13.4
Minneapolis, Minn.	19.2	0	19.2	21.2	13.6
Duluth, Minn.	19.5	0	19.5	21.5	13.6
Mankato, Minn.	19.1	0	19.1	21.1	13.4
Des Moines, Iowa	18.5	0	18.5	20.5	12.9
Davenport, Iowa	18.5	0	18.5	20.5	12.9
Sioux City, Iowa	18	0	18	20	12.5
Mason City, Ia.	18.5	0	18.5	20.5	12.9
St. Louis, Mo.	**17.6	2	19.6	21.9	12
Kansas City, Mo.	††18.9	2	20.9	22.9	11.8
St. Joseph, Mo.	**18	2	20	22	11.9
Fargo, N. D.	19.9	1	20.9	22.9	15.6
Grand Forks, N. D.	20.1	1	21.1	23.1	15.9
Minot, N. D.	20.9	1	21.9	23.9	15.6
Pierre, S. D.	20	3	23	*	14.1
Huron, S. D.	20	3	23	25	14.1
Wichita, Kans.	17.8	0	17.8	19.8	11.8
Bartlesville, Okla.	16.9	3	19.9	21.9	10.9

†Dumps of 100 or more gallons at 18c per gallon.
*S. O. Indiana does not operate station
**Includes city tax of ½c.
††Includes city tax of 1c.

S. O. NEBRASKA

Crawford, Neb.	19	2	21	*	13.25
Omaha, Neb.	16	2	18	20	12.5
McCook	19.75	2	21.75	23.75	14
Norfolk	18.75	2	20.75	22.75	13
North Platte	19.75	2	21.75	23.75	13.75
Scotts Bluff	19.25	2	21.25	23.25	13.25

*Standard has no service station here.

CONTINENTAL OIL

Denver, Colo.	19	2	21	23	14.5
Pueblo, Colo.	19	2	21	23	14.5
Casper, Wyo.	19	2½	21.5	23.5	13
Cheyenne, Wyo.	20.5	2½	23	25	14.5
Butte, Mont.	21	2	23	23	16
Helena, Mont.	23	2	25	27	17
Salt Lake City, Utah	20.5	3½	24	26	18
Boise, Ida.	21.5	3	24.5	26.5	20
Albuquerque, N. M.	23.5	3	26.5	29.5	16.5

S. O. CALIFORNIA

Phoenix, Ariz.	20	3	23	26	21.5
Los Angeles, Cal.	13.5	2	15.5	18.5	15.5
Fresno, Cal.	15.5	2	17.5	20.5	17.5
San Francisco, Cal.	15	2	17	20	15.5
Reno, Nev.	18.5	2	20.5	23.5	19
Portland, Ore.	15	3	18	21	16.5
Seattle, Wash.	15	2	17	20	16.5
Spokane, Wash.	19	2	21	24	20.5
Tacoma, Wash.	15	2	17	20	16.5

S. O. LOUISIANA

Camden, Ark.	17	4	21	23	13
Little Rock, Ark.	17	4	21	23	11
West Helena, Ark.	17	4	21	23	12
Alexandria, La.	16.5	2	18.5	20.5	13
Baton Rouge, La.	15	2	17	19	11.5
Lake Charles, La.	16.5	2	18.5	20.5	13
New Orleans, La.	16.5	2	18.5	20.5	12
Shreveport, La.	16.5	2	18.5	20.5	13
Bristol, Tenn.	18	3	21	23	13.5
Chattanooga, Tenn.	17.5	3	20.5	22.5	14.5
Knoxville, Tenn.	18.5	3	21.5	23.5	15
Nashville, Tenn.	17.5	3	20.5	22.5	13.5
Memphis, Tenn.	16	3	19	21	14

S. O. OHIO

	Gasoline T.W	Tax	Total	S.S.	Oil T.W.
All Ohio points	18.5	0	18.5	20.5	15

MAGNOLIA PETROLEUM

Muskogee, Okla.	16.5	3	19.5	22.5	12
Oklahoma City	16.5	3	19.5	22.5	12
Tulsa, Okla.	16.5	3	19.5	22.5	11
Fort Smith, Ark.	17	4	21	24	12
Little Rock, Ark.	17	4	21	23	11
Texarkana, Ark.	18	4	22	25	12
Dallas, Tex.	16	1	17	21	12
El Paso, Tex.	18	1	19	22	13
Fort Worth, Tex.	16	1	17	21	12
Houston, Tex.	16	1	17	21	12
San Antonio, Tex.	16	1	17	20	12

*Within city of Texarkana, Ark., the state tax on gasoline is 1c per gal. conforming with the Texas state tax. In Texarkana district outside of the city, the 4c state tax applies.

V. M. & P. NAPHTHA

(Changes ordinarily occur coincident with gasoline)

	V.M.&P. Naphtha	Oleum Spirits
Chicago	21	19
Detroit	22.7	20.2
Milwaukee	21.7	19.2
Minneapolis	23	20.5
St. Louis	20.9	18.4
New York	19½	....
Cleveland	19	....

CANADA

Posted by Imperial Oil, Ltd.
(Per Imperial Gallon, which is 1.2 American Gallons)
Prices in effect April 6, 1925

	Gasoline T.W.	Tax	Total	S.S.	Oil T.W.
ONTARIO					
Toronto	24.5	0	24.5	28	20
Ottawa	25.5	0	25.5	29	21
Cochrane	29.5	0	29.5	33	24.5
Ft. William	27.5	0	27.5	31	22.5
MANITOBA					
Winnipeg	27.5	3	30.5	34	22.5
SASKATCHEWAN					
Regina	30.5	0	30.5	34	25.5
ALBERTA					
Edmonton	32.5	2	34.5	38	27.5
Calgary	31.5	2	33.5	37	26.5
BRITISH COLUMBIA					
Vancouver	23	3	26	30	23
QUEBEC					
Montreal	24.5	2	26.5	30	20
Quebec City	26.5	2	28.5	32	22
NEW BRUNSWICK					
St. John	27.5	0	27.5	31	23
Moncton	29.5	0	29.5	33	25
NOVA SCOTIA					
Halifax	27.5	0	27.5	31	23
Sydney	29.5	0	29.5	33	25
PRINCE EDWARD ISLAND					
Charlottetown	27.5	2	29.5	31	23

Note: In districts surrounding these points 1c additional is added to city price.

Complete Export Markets

New York **Gulf Coast** **California**

Export Demand for Gasoline Better At New York; Waxes Slipping

NEW YORK, April 6
By Special Correspondent

EXPORT demand for gasoline is slightly better but the easier tendency in prices has discouraged buyers from making bulk purchases. At the end of the week, U. S. Motor gasoline was available at 13 cents a gallon at the New York harbor refineries, with persistent rumors current that this price could be shaded ¼ cent on a firm bid. In tank cars delivered to the domestic trade refineries were asking 14 to 14¼ cents a gallon.

A good consignment movement is going on.

South American buyers have been inquiring for cased gasoline in a more active way. One inquiry for 25,000 cases was received from the Argentine for May shipment. Chinese buyers are still inquiring for gasoline but are purchasing sparingly. A Japanese concern was inquiring for 30,000 cases of gasoline for May shipment, but this did not materialize.

A large French concern was looking around for two mixed cargoes of gasoline and kerosene, 49,000 barrels each, but withdrew from the market early in the week as its buyers believe that the market will ease off at least ½ cent a gallon during the next 10 days. A British concern was inquiring for a cargo of 35,000 barrels of gasoline, but this is still hanging fire.

Waxes Continue Down

Waxes resumed the downward trend and 122-124 A.m.p. white crude scale, is now offered around freely at 4½ cents a pound, in slack barrels f.a.s. New York. There has been a dearth of buying orders. The belief prevails in many quarters that prices will go lower shortly. There is an over abundance of Polish wax on the European market at prices appreciably below prices of American wax, and until the latter is brought into line with the former no European buying to speak of is looked for.

Kerosene is also a trifle easier and 45-47 water white was offered at 7¼ cents in bulk at the refineries, with indications that this price might be shaded a trifle on a firm bid for a large quantity. There was an inquiry from a large Continental buyer for 35,000 barrels for prime and water white in conjunction with U. S. Motor and 64-66 gravity gasoline, and it is understood that one of the large Independents expects to close this deal shortly. There was a steady movement in lots of from 500 to 1000 drums to France and Germany but stocks abroad are of moderate proportions. The tank wagon price was steady at 13 cents a gallon.

Cased kerosene is moving into export channels in a steady way but mainly on consignment, and no fresh buying worth mentioning developed. South American and Chinese buyers are following the market closely but no sizable contracts were closed.

Gas oil is easier and leading refiners reduced 36-40 ¼ cent a gallon to 6 cents in bulk at the refineries while 28-34 showed a similar decline to 5¾ cents. The export demand is lagging and no cargo or part cargo movements were disclosed. Domestic consumption is fair but stocks are accumulating.

Diesel oil held steady at $2.35 a barrel at the refinery. Export demand lagged and the movement was chiefly against standing contracts. Bunker oil was steady at $1.80 a barrel for grade C at the refinery.

Lubricants were softer. Pennsylvania 600 steam refined cylinder stock is offered around freely at from 26 to 27 cents a gallon in barrels, New York. There is a steady movement to the Continent in lots of 500 to 1000 barrels. The demand from France for this oil is a trifle better and two orders for 500 each were reported by one of the smaller Independents. Paraffin oils are quiet.

The movement in petrolatum is less spirited. Export buying has been fitful and snow white is freely offered at 12½ cents a pound against 13 cents the previous week. Lily white is off ½ cent at 10 cents a pound. Domestic consumption is fair, but is expected to increase shortly as the manufacturers of facial creams and other toilet preparations are inquiring more actively. Medicinal oils were dull and unchanged.

Competition for Export Business Drives Prices Down

By Special Correspondent
NEW ORLEANS, April 6

EXPORT demand for the major petroleum products, was more active last week but the keen competition among the leading independents which developed price shading, tended to discourage foreign buyers. On Saturday U. S. Motor gasoline was quoted at 12¼ cents with indications that 12 cents could have been done on a firm bid while 64-66, 375 end point gasoline was offered at 15¼ to 15¾ cents a gallon.

A leading independent sold a cargo of 14,000 barrels of U. S. Motor and 42,000 barrels of 64-66 gasoline to a French buyer for May shipment. It is reported that the former brought 12¼ cents and the latter 15¼ cents. One of the other large independents was working on a similar cargo for late April shipment to France.

A big British buyer was in the market for two mixed cargoes for May shipment but withdrew during the middle of the week. Several French buyers who sought three mixed cargoes also withdrew at the same time, presumably due to the downward tendency of prices. It is expected that all of these buyers will be back early this week. Several of them look for a decline of at least ½ cent a gallon before next Saturday.

Cased Gasoline Improves

Cased gasoline is in slightly better demand and one of the large independents reported the sale of 30,000 cases of gasoline and kerosene for April shipment to the Far East. Cased U. S. Motor is still quoted in cargo lots at $2.50 a case, but this price is weak. South American buyers are purchasing cautiously, and three sales of 5000 cases of U. S. Motor were reported for May shipment.

A German concern was in the market for a cargo of 42,000 barrels of assorted lubricating oils, and this deal was practically closed by one of the leading Independents. This oil will be shipped to Hamburg late this month. Zero cold test lubricants were easier. One or two re-

N. Y. Domestic Market

The following light oil, gas and fuel oil prices are F. O. B. New York refineries, being products made from Domestic (including California) and Mexican Crudes.

	Apr. 6	Mar. 30
U. S. Motor Gasoline, Tank Cars Delivered	-14¼	-14½
U. S. Motor Gasoline, Tank Cars Bayonne	-13½	-13½
Kerosene, 45-150 W. W. Tank, Cars Del'd	-.08¼	.08-.08½
Grade C Bunker, f.o.b. N.Y.	1.80	1.80
Diesel Oil f.o.b. Refinery	2.35	2.35
Gas Oil, 36-40, Bulk, Refinery	-06	-06¼
Gas Oil, 28-34	-05¾	-06

finers appear more inclined to make concessions but no actual reductions were recorded.

Kerosene was a shade easier. Water white was still quoted at 6¾ cents and prime white at 5¾ cents a gallon. There were several inquiries as noted above, but no fresh sales developed. A German buyer was inquiring for a cargo of 35,000 barrels for April shipment, but this is still hanging fire. There were two bulk inquiries from the United Kingdom but neither of these materialized.

Cased kerosene is dull at $1.60 for prime white and $1.70 a case for water white. The movement is still mainly against contracts and on consignment. There was an inquiry from South America for 5000 cases for April shipment, and one of the Independents expects to close this soon.

Bunker Oil Unchanged

Bunker oil showed little change the price for grade C being $1.70 a barrel while at Tampico, including taxes the price was $1.65 a barrel. Export demand has been sluggish although there was an inquiry in the market from the United Kingdom for a cargo of 45,000 barrels. Heavy Panuco crude oil was quoted at $1.40 a barrel at Tampico, taxes to be added.

Gas oil was quiet. There were no bulk inquiries or purchases reported and 32 plus dark oil was still quoted at 5½ cents a gallon while 26-28 transparent was steady at 5¾ cents a gallon. Offerings are slightly more numerous. However, a large part of the European requirements are being taken care of by the Galician refiners.

Waxes were weaker. Export demand is light, and the tendency is toward lower levels. South American buyers are showing little interest. White crude scale stocks are accumulating steadily. United Kingdom buyers are well covered for the present and as the candle making season is over no buying of consequence is looked for from this source for some time.

Petrolatums are dull and prices unchanged. Domestic consumption is fair and no price changes of consequence took place. Medicinal oils are marking time.

California Gasoline Again Stabilized

LOS ANGELES, April 3.—Once more the California gasoline market has become stable. Since the recent price war of the Independents and the elimination of the coupon book, which was the basis of the trouble, the market is now in a sounder position than it has been for several months. Not only has the gasoline market strengthened materially but the settlement of the price war had the effect of settling the market for many other oils.

The casinghead gasoline market is back at 13 and 13½ cents. Domestic fuel oil demand is good.

Exports are also keeping up in fine

New York Export Market

Prices below are averages of actual sales by local exporting Agencies

GASOLINE	Apr. 6	Mar. 30
U. S. Motor, Bulk, Ref.	-13	-13½
KEROSENE		
45-150 W. W. Bulk Ref.	-07¼ -07	-07½
GAS OIL		
36-40, Bulk Ref.	-6	-6¼
28-34, Bulk Ref.	-5¾	-6
BUNKER OIL		
Grade C, Ref.	1.80	-1.80
Diesel Oil-Ref.	2.35	-2.35

LUBRICATING OILS

The following prices are cooperage basis f. o. b. New York, products being manufactured by inland refineries.

CYLINDER OILS BBLS.		
Penna. Filtered D 600	-35	-35
Penna. Filtered E 600	-33	-33
Unfiltered 600 s. r.	26 -27	-27
Unfiltered 650 s. r.	32½-33½ 33	-35
600 flash s. r.	-41½	-43
Western 600 s. r.	13 -14	13½-14½
Bloomless 30-31 grav.	-25	-25
RED PARAFFIN (bbls.)		
300 vis. at 100°F.	24 -25 24	-25
250 vis. at 100°F.	-23	-23
175 vis. at 100°F.	-23	-23
High Viscosity Paraffin	-31	-31
.885 s. g. pale 100 vis. at 100°F	14½-15	-15
SPINDLE (bbls.)		
200 vis. at 100°F. Pale	-25¼	-25¼
180 Pale	-23½	-23½
150 Pale	-21	-21
BLACK OIL (bbls.)		
25-30 cold test	14 -15½14	-15½
15 cold test	15 -15½15	-15½

MEDICINAL OILS (Cooperage Basis) (Penna. Stocks)	Apr. 6	Mar. 30
Domestic.875-.885s.g.drums	1.00-1.08	1.00-1.08
Domestic.865-.870s.g.drums	75 -80	75- 80
Russian.885-.890s.g.325-330 vis. drums	1.25	1.25
WAXES (Penna. Stocks) (F. A. S. Carload Lots)		
WHITE CRUDE SCALE		
122-124 A. m. p.	04½	-04¾ -04⅞
124-126 A. m. p.	04¾	-04⅞ -05
MATCH		
105-108 A. m. p.	nominal	-05⅞
111-115 A. m. p.	nominal	05⅞ -06
FULLY REFINED		
120-122 A. m. p.	05¾ -06	05¾-06
123-125 A. m. p.	-06	-06
125-127 A. m. p.	-06	-06
128-130 A. m. p.	06¼ -06⅜	06¼-06⅜
130-132 A. m. p.	-06½	-06½
133-135 A. m. p.	7¾ -07½	07¾-07½
SEMI REFINED		
122-124 A. m. p.	05 -05⅛	05 -05⅛
YELLOW CRUDE SCALE		
124-126 A. m. p.	-04¾	04¾-05
PETROLATUMS (Penna. Stocks)		
Snow White	12½	13
Lily White	10	10¾
Cream	07¼	07¾
Light Amber	03¾	03⅞
Dark Amber	03⅞	04
Veterinary	03¾	03¾
Dark Green	02⅞	02⅞

N. Y. Export Quotations

Furnished by big exporting oil companies. No actual sales. Record for statistical purposes only.

Illuminating Oils
Standard Oil of New Jersey

	Apr. 6	Mar. 30
Bulk, gal., Bayonne	6.50	6.50
Barrels, gal., Bayonne, cargo	13.50	13.50
Cases, gal., Bayonne	16.90	16.90

Prices for water white oil (150 test) are 1 cent higher than those for standard white.

Gasoline-Naphtha
(Cents per Gallon)

U. S. Motor, dead bulk	15.00	15.00
U. S. Motor, cases	29.15	29.15
Export Naphtha bulk	17.75	17.75
*62-63 deg. bulk	19.00	19.00
66-68 deg. bulk	20.50	20.50

*Grade changed from 64-66 to 62-63 Jan. 9.

Tide Water Oil Company
(f. o. b. Bayonne)

58-59 deg. bulk	16.00	16.00
58-59 deg. cases	29.65	29.65
Export grade, U. S. Motor Specifications bulk	15.00	15.00
63-65 deg. bulk	19.00	19.00
68-72 deg. bulk	21.50	21.50

The Texas Company

	Bulk	Barrels	Cases
Standard white 110	6.50	13.50	16.90
Water white 150	7.50	14.50	17.90
Gasoline, cases		29.15	29.15
Kerosene			
Standard White	6.50	13.50	16.90
Prime White	7.00	14.00	17.40
Water White	7.50	14.50	17.90

Gulf Export Market

(Actual Sales Prices)
Gasoline

	Apr. 6	Mar. 30
U. S. Motor, Bulk	12¾ -.12¾	-.12¾
60-62 gr. 400 e. p.	-.14	-.14½
64-66, Bulk	15¾ -.15¾	-.16
U. S. Motor, Cases (cargo lots)	2.50	2.50
64-66. Cases (cargo lots).	2.80	2.80
KEROSENE		
Water White, bulk	-.06¾	-.06¾
Prime White, bulk	-.05½	-.05¾
Water White, cases (cargo lots)	1.70	1.70
Prime White, cases (cargo lots)	1.60	1.60
GAS AND BUNKER OIL		
26-28, gravity, bulk	-06	-06
32 plus, bulk. Dark	-05¾	-05¾
Grade C, Bunker oil	1.70-1.75	1.70-1.75
MEXICAN CRUDE AND BUNKER OILS		
*Heavy, f.o.b. Tampico, Taxes to be added	1.40	1.40
Mexican Grade C, Bunker oil F. O. B. Tampico Taxes paid	1.65	1.65
Mexican C, Bunker oil New Orleans	1.70	1.70

Lubricating Oils

SOUTH TEXAS
(Viscosity at 100°F; cold test 0)
(Tanker, F. O. B. Houston)

	Apr. 6	Mar. 30
100 Vis. No. 2 Unfilt. Pale	11	11
150 Vis. No. 2½ Unfilt. Pale	13	13
200 Vis. No. 3 Unfilt. Pale	15½	15½
300 Vis. No. 3 Unfilt. Pale	17½	17½
500 Vis. No. 3½ Unfilt. Pale	19	19
750 Vis. No. 4 Unfilt. Pale	24½	24½
200 Vis. No. 5½ Red Oil	14½	14½
300 Vis. No. 5½ Red Oil	16½	16½
500 Vis. No. 6 Red Oil	18	18
750 Vis. No. 6 Red Oil	23	23

*Nominal

volume. Kerosene market is only fair but it has held its position for six months without any material weakening.

The lubricant market is sluggish.

Cargoes Clearing From N. Y.

Date	Destination	Product	Quantity
Mar. 16	Teneriffe, C. I	Ref. Pet.	1,000 cases
Mar. 16	Teneriffe,	Naphtha	1,500 cases
Mar. 16	Las Palmas, C.I.	Naphtha	2,600 cases
Mar. 16	Las Palmas	Ref. Pet.	1,000 cases
Mar. 16	Dakar	Naphtha	4,100 cases
Mar. 16	Dakar	Ref. Pet.	1,300 cases
Mar. 16	Seccondee	Ref. Pet.	1,000 cases
Mar. 16	Seccondee	Naphtha	1,358 cases
Mar. 16	Accra	Naphtha	11,277 cases
Mar. 16	Accra	Ref. Pet.	750 cases
Mar. 16	Lome	Ref. Pet.	2,500 cases
Mar. 16	Lome	Naphtha	1,200 cases
Mar. 18	Adelaide	Ref. Pet.	5,000 cases
Mar. 18	Adelaide	Naphtha	7,000 cases
Mar. 18	Fremantle	Ref. Pet.	4,500 cases
Mar. 18	Fremantle	Naphtha	12,500 cases
Mar. 19	Melbourne	Ref. Pet.	2,200 cases
Mar. 19	Melbourne	Naphtha	10,850 cases
Mar. 19	Adelaide	Ref. Pet.	2,500 cases
Mar. 19	Adelaide	Naphtha	3,000 cases
Mar. 19	Sydney	Gasoline	4,000 cases
Mar. 19	Sydney	Gasoline	2,500 cases
Mar. 20	Liverpool	Lubes	1,085 bbls.
Mar. 19	Naples	Lubes	602 bbls.
Mar. 19	Alexandretta (Syria)	Ref. Pet.	90,000 cases
Mar. 19	Alexandretta	Gasoline	30,000 cases
Mar. 20	Stavanger (Noway)	Lubes	575 bbls.

British Importations

During the week ended March 16 there were imported into the United Kingdom 48,029,317 imperial gallons of petroleum. Larger receipts were:

Consignee	Imperial Gallons	Product	Port of Origin
At London—			
Brit-Mex	2,029,482	Fuel Oil	Tampico
Brit-Pet	191,800	Gasoline	Trinidad
Brit. Pet	369,297	Gasoline	Trinidad
Immediate Transp't'n	240,593	Kerosene	Constanza
Anglo-Amer	1,473,000	Gas Oil	Sabine
Anglo-Amer	4,183,780	Naphtha	San Pedro
Anglo-Amer	1,882,780	Gasoline	New Orleans
Anglo-Mex	2,360,000	Fuel Oil	Tampico
United Caucasian	228,750	Gasoline	Beaumont
United Caucasian	270,000	Kerosene	Beaumont
Shell	2,166,794	Benzine	Singapore
Davies & Newman	646,319	Gasoline	Beaumont
Red Line Motor Co.	1,650,000	Gasoline	S. Francisco
At Liverpool—			
Brit-Mex	306,528	Fuel Oil	Tampico
Brit-Mex	156,530	Fuel Oil	Tampico
Anglo-Amer	1,668,830	Fuel Oil	Baton Rouge
Anglo-Amer	467,400	Lubes	New York
At Hull—			
Anglo-Mex	1,530,000	Gasoline	San Pedro
At Manchester—			
Anglo-Amer	831,150	Kerosene	New York
Anglo-Amer	704,192	Lubes	New York
Anglo-Amer	1,951,570	Gasoline	New York
At Southampton—			
Brit-Mex	2,113,543	Crude	Asuba Isles
At Swansea—			
Nat'l Ref	15,500,000	Crude	Abadan
At Grangemouth—			
Scottish Oils	2,313,500	Crude	Abadan

COSHOCTON, O.—The Thomson Gasoline Co. just started in operation a new 800 gallon tank truck. Other delivery equipment of the company includes a 500 gallon truck, a 300 gallon truck and one 400 gallon tank wagon.

J. W. Thomson, president, says that the company's March business was 26 per cent greater than March, 1924.

TULLY, N. Y.—Spot Oil Co., Inc., has completed its drive-in service station here, which is equipped with bulk storage, according to John C. Reagan, of the Spot company.

Crude Oil Prices All Fields

EASTERN FIELDS

	1925 Apr. 6	1924 High	1924 Low	1923 High	1923 Low
Bradford Allegany	$3.65	Jan.30..$4.50	Aug.21..$2.85	Feb.15..$4.25	Nov.13..$2.60
Gaines and other Penna	3.55	Jan.30.. 4.00	Aug.5... 2.75	Feb.15.. 4.00	Nov.13.. 2.35
West Virginia	3.50				
Penna. grade in Ohio	3.40				
Cabell	2.20	Mar.10.. 2.20	Jan.1and Aug.5. 1.45	Feb.15.. 2.76	Nov.13.. 1.20
Corning	2.10	Mar.10.. 2.15	Jan.1... 1.40	Feb.15.. 2.30	Nov.14.. 1.25
Somerset	2.30	Mar.10.. 2.30	Jan.1... 1.40	Feb.15.. 2.55	Nov.13.. 1.15
Somerset Light	2.45	Mar.10.. 2.50	Jan.1... 1.55	Feb.15.. 2.80	Nov.13.. 1.30
Ragland	1.30	Mar.10.. 1.10	Jan.1... .85	Feb.15.. 1.10	July 10.. .75

Somerset oil run prior to Oct. 1, 1923, takes price of 6 cents lower than above quotations.

CENTRAL STATES FIELDS

Wooster	$2.15	Mar.8...$2.15	Jan.1,and Sept.18 $1.40	Feb.19..$2.50	Nov.9...$1.25
Lima	2.23	Mar.8... 2.28	Jan.1... 1.53	Feb.19.. 2.58	Nov.9... 1.45
Indiana	2.03	Mar.8... 2.08	Jan.1... 1.33	Feb.19.. 2.38	Nov.9... 1.23
Princeton	2.02	Mar.8... 2.07	Jan.1... 1.32	Feb.19.. 2.37	Nov.8... 1.22
Illinois	2.02	Mar.8... 2.07	Jan.1... 1.32	Feb.19.. 2.37	Nov.8... 1.22
Plymouth	1.55	Mar.8... 1.45	Jan.1... .70	Feb.19.. 1.75	Nov.9... .60
Canadian Petrolia	2.63	Mar.8... 2.68	Jan.1... 1.93	Feb.19.. 2.98	Nov.9... 1.83

MID-CONTINENT AND NORTH TEXAS FIELDS

Below 30	$1.35	Currie	$2.00
30-32.9	1.55	Mexia	2.00
33-35.9	1.80	Powell	2.00
36-38.9	2.00		
39-41.9	2.25		
42 and above	2.35		

Humble's Prices
Moran Field Texas

Below 30	$1.35	36 and above	$2.00
30-32.9	1.55	Wortham	2.00
33-35.9	1.80	Richland	2.00

Magnolia's Price Schedule
North and North-Central Texas, Okla., and Kan.

Below 28	$1.00	Corsicana, light, Powell, Mexia	$2.00
28-30.9	1.35	Corsicana, heavy	1.00
31-32.9	1.55	Thrall	1.00
33-35.9	1.80	*Magnolia pays $2 and $2.25 respectively for these two grades in Okla. and Kan.	
*36-38.9	1.95		
*39-41.9	2.10		
42 and above	2.35		

NORTH LOUISIANA—ARKANSAS FIELDS

Caddo, 38 degrees and above	$2.05	Bull Bayou, 38 and above	1.85
do 35 to 37.9	1.95	do 35 to 37.9	1.70
do 32 to 34.9	1.85	do 32 to 34.9	1.55
do below 32	1.70	De Soto	1.90
Homer, 35 and above	1.80	Crichton	1.70
do 33 to 34.9	1.70	Bellevue	2.00
do 31 to 32.9	1.60	Smackover 28 and above	1.30
do below 31	1.45	do 27-27.9	1.25
Haynesville, 38 and above	1.70	do 26-26.9	1.20
do below 38	1.60	do 25-25.9	1.10
El Dorado 38 and above	1.70	do below 25	1.00
do below 38	1.60	Stephens 26 and above	1.60
		do below 26	1.40
		Cotton Valley	1.00

GULF COASTAL FIELDS

	1925 Apr. 6	1924 High	1924 Low	1923 High	1923 Low
Spindletop	$2.00	Apr.1...$2.00	Jan.1 and Sept.17.....$1.25	Mar.15..$1.75	Aug.18..$1.00
Goose Creek "A"	2.00	Apr.1...$2.00	Jan.1 and Sept.17..... 1.25	Mar.15.. 1.75	Aug.18.. 1.00
Goose Creek "B"	1.75	Apr.1... 1.70	Sept.17..... 1.05	Mar.15.. 1.50	Aug.18.. 1.00
Sour Lake	2.00	Apr.1... 2.00	Jan.1 and Sept.17..... 1.25	Mar.15.. 1.75	Aug.18.. 1.00
Humble	2.00	Apr.1... 2.00	Jan.1 and Sept.17..... 1.25	Mar.15.. 1.75	Aug.18.. 1.00
Hull "A"	2.00	Apr.1... 2.00	Jan.1 and Sept.17..... 1.25	Mar.15.. 1.75	Aug.18.. 1.00
Hull "B"	1.75	Apr.1... 1.70	Jan.1 and Sept.17..... 1.00	Mar.15.. 1.30	Jan.1... .80
West Columbia	2.00	Apr.1... 2.00	Jan.1 and Sept.17..... 1.25	Mar.15.. 1.75	Aug.18.. 1.00
Edgerly	2.00	Apr.1... 2.00	Jan.1 and Sept.17..... 1.25	Mar.15.. 1.75	Aug.18.. 1.00
Vinton	2.00	Apr.1... 2.00	Jan.1 and Sept.17..... 1.25	Mar.15.. 1.75	Aug.18.. 1.00
Jennings	2.00	Apr.1... 2.00	Jan.1 and Sept.17..... 1.25	Mar.15.. 1.75	Aug.18.. 1.00
Saratoga	2.00	Apr.1... 2.00	Jan.1 and Sept.17..... 1.25	Mar.15.. 1.75	Aug.18.. 1.00
Orange "A"	2.00	Apr.1... 2.00	Jan.1 and Sept.17..... 1.25		
Orange "B"	1.75	Apr.1... 1.70	Jan.1 and Sept.17..... 1.00		
Pierce Junction "A"	2.00	Apr.1... 2.00	Jan.1 and Sept.17..... 1.25		
Pierce Junction "B"	1.75	Apr.1... 1.70	Jan.1 and Sept.17..... 1.00		

WYOMING FIELDS

Elk Basin	$2.15	Mar.10..$1.65	Jan.1...$ .95	Feb.17..$2.10	Nov.9...$ .95
Grass Creek	2.15	Mar.10.. 1.95	Jan.1... .95	Feb.17.. 2.10	Nov.9... .95
Big Muddy	2.00	Mar.10.. 1.50	Jan. 1... .45	Feb.17.. 1.65	Nov.9... .45
Salt Creek	1.60	Mar.10.. 1.60	Jan.1... .60	Feb.17.. 1.65	Nov.9... .60
Lance Creek	2.15	Mar.10.. 1.90	Jan.1... .90	Feb.17.. 2.10	Nov.9... .80
Rock Creek	2.00	Mar.10.. 1.70	Jan.1... .60	Feb.17.. 1.75	Nov.9... .60
Osage	2.15	Mar.10.. 1.90	Jan.1... .90	Feb.17.. 2.10	Nov.9... .80
Cat Creek, Mont	2.15	Mar.10.. 1.95	Jan.1... .95	Feb.17.. 2.10	Nov.9... .95
Sunburst, Mont	1.20	Mar.10.. 1.05	Jan.1.... 70	Feb.17.. 1.50	June 6.. .70

CALIFORNIA

14-19.9	$1.25	25-25.9	$1.44	30-30.9	$1.64
20-20.9	1.27	26-26.9	1.48	31-31.9	1.68
21-21.9	1.30	27-27.9	1.52	32-32.9	1.72
22-22.9	1.33	28-28.9	1.56	33-33.9	1.76
23-23.9	1.36	29-29.9	1.60	34-34.9	1.80
24-24.9	1.40			35 and above	1.85

ROSECRANS FIELD

36-36.9	$1.92
and for each increase of one full degree above 36° gravity, up to and including 41.9° gravity, 8 cents per barrel additional	
2 and above	$2.40

Marland Extends Marketing Operations in Illinois

PONCA CITY, OKLA., April 2.—A plan by the Marland Refining Co. to make Springfield, Ill., its marketing headquarters in Illinois, was recently carried out when it purchased the Stafford Oil Co. of that city, including its three service stations. The Marland plans to operate a string of service stations throughout the southern part of the state, using Springfield as division headquarters.

Milton Dermody, who has been with Marland for four and a half years, being most recently assistant sales manager in Illinois territory, has been appointed manager of the Springfield division. C. D. Montgomery, who has been assistant manager at Oklahoma City, has been transferred to Springfield in a similar capacity.

Receiver is Appointed For Lubac Corp.

Staff Special

CHICAGO, April 4.—The Lubac Corp., a Chicago firm which started operations at a plant on the south side of the city with Illinois Central trackage about three years ago to manufacture a motor tonic, has gone into the hands of a receiver. The company manufactured several products, but most prominent among them were the motor tonic, supposed to combat carbon in automobile motors increase power and mileage and eliminate knocks; and a penetrating oil for repair shop uses.

Monte H. Sadler, 231 South La Salle st., was appointed receiver of the assets and the property by Judge Hugo M. Friend of the circuit court of Cook County. In a circular letter to interested parties Mr. Sadler says in part:

"Immediately upon my appointment I took possession of the property and assets of the defendant corporation and find that they have real estate which is estimated to be worth $250,000 on which there is a first mortgage of $75,000 and a second mortgage of $20,000. Part of the principal on the first mortgage is past due and there has been a default of payment of interest on said mortgage in the sum of $2,600 as well as taxes for the year 1923 and 1924.

"There is on hand approximately $10,000 of personal property consisting of manufactured product and other material and ingredients used in the manufacture of the product known as Lubac, also some furniture, fixtures and one truck. The liabilities of the corporation, outside of the secured indebtedness above referred to, amounts to approximately $25,000. This excludes the claims of officers, directors and stockholders."

Refiners', Compounders' Supplies

Following are the average market prices for the week on materials used by refiners and compounders f. o. b. shipping point as effective this date.

Refiners' Supplies

		Apr. 6	Mar. 30
Soda Ash light 58% bags	cwt.	-$1.38	-$1.38
Silicate of Soda 60 deg. drums	cwt.	- 1.70	- 1.70
Sal Soda wks	cwt.	1.10- 1.25	1.10- 1.25
Caustic Soda 76% solid	cwt.	- 3.10	- 3.10
Chloride of Lime works	cwt.	1.90- 2.10	1.90- 2.10
Sulphuric Acid 60 deg. tank cars f. o. b. shipping point	per ton	9.50-11.00	9.50-11.00

Compounders' Supplies (Open Market)

Vegetable Oils—			
Linseed carloads spot	gal.	- 1.04	- 1.09
April		- 1.06	- 1.11
May-August		- 1.07	- 1.12
Tanks, spot		- .98	- 1.03
Less carload spot	gal.	- 1.07	- 1.12
Less than 5 bbls. spot		- 1.09	- 1.14
Boiled tank spot		- 1.01	- 1.06
Boiled, carloads spot	gal.	- 1.07	- 1.12
*Soya Bean spot, tanks	lb.	- .12	- .12
Animal Oils—			
English Degras	lb.	-.04¾	-.04¾
Domestic Degras, bbls., carloads	lb.	-.04¾	-.04¾
*Horse	lb.	-.09½	-.09½
Oleic Acid—			
Dist.	lb.	-.11¼	-.11¼
Saponified	lb.	-.11¼	-.11¼
Lard Oils—			
Prime Winter Strained.. 1 to 1½ ffa. 40‡45c.t.	lb.	.19¼	.20⅛
Extra Winter Strained.. 2 to 4½ ffa. 40/45c.t.	lb.	.17¾	.18¼
Extra 4 to 5 ffa. 40/45c.t.	lb.	.15¾	.15¾
Extra No. 1. 7 to 10 ffa. 40/50c.t.	lb.	.14	.14
No. 1 15 to 18 ffa. 40/45c.t.	lb.	.13½	.13½
No. 2 22 to 25 ffa. 40/45c.t.	lb.	.13	.13
Prime Edible Tallow under 1¾ ffa. 40/45c.t. N. Y.	lb.	-.10¾	-.10¾
Tallow acidless	lb.	-.13¼	-.13¼
Lard Stearine	lb.	-.19½	-.17
Oleo Stearine	lb.	-.13¾	-.13¾
Neatsfoot Oil—			
Pure	bbls.-lb.	.15	.15
Extra	do lb.	.14	.14
No. 1	do lb.	.13½	.13½
Cold pressed	lb.	.17¾	.17¾
Fish Oils—			
Menhaden Oil Light pressed	gal.	-.78	-.78
White	gal.	-.83	-.83
Yellow bleached	gal.	-.81	-.80
*Herring tank cars coast	gal.	-.40	-.40
Whale, extra winter bleached	gal.	-.84	-.84
Seal	gal.		Nominal
Naval Stores—			
Turpentine, N. Y.	gal.	.90	.90½
Turpentine†	gal.	.88¾	.84¾
Rosin, B. N. Y.	Bbl.	8.00	8.00
Rosin F. N. Y.	Bbl.	8.30	8.30
Rosin B†	Bbl.	6.70	6.70
Rosin F†	Bbl.	7.00	7.00
Rosin Oil 1st run	gal.	.48	.48
Rosin Oil 2nd run	gal.	.51	.51
Pine Tar—			
Kiln Burnt	Bbl.	13.50	13.50
Retort	Bbl.	13.50	13.50

†Savannah, Ga. market.
*Nominal.

Caustic Soda Active; Prices Firm

NEW YORK, April 6.—Following is a review of the markets for oils and supplies used in compounding and refining:

Linseed Oil—Prices down 2 cents a gallon reflecting decline in flaxseed. Buying very spasmodic and generally light. Spot August raw oil now $1.04 a gallon carlots, cooperage basis. Stocks moderate. Demand chiefly for immediate delivery. Little interest in futures.

Soya Bean Oil—Dull but steady at 13¼ to 13½ cents a pound in barrels, New York. Stocks small.

Animal Oils—In slightly better demand. Prices steady. Demand for degras better. Little interest in neatsfoot oil. Lard oil movement gaining. Demand for stearine less active. Tallow oil weaker as buyers hold off.

Fish Oils—Crude menhaden still 55 to 60 cents in tank cars, factory. Buyers inquiring actively but reluctant to pay these prices. Light pressed oil in good demand at 78 cents. Stocks moderate. Whale oil flat.

Sulfuric Acid—Demand slightly better but prices unchanged. Movement on contract gaining.

Soda Ash—In better demand. Movement chiefly against old orders. Prices well held.

Caustic Soda—Export inquiry better. More fresh buying. Deliveries on contract large, keeping stocks down. Prices firm.

Bleaching Powder—More interest in both spot and futures. Big makers report better demand for immediate deliveries. Prices well held.

Naval Stores—Export buying of turpentine is light. Domestic movement hand-to-mouth, and market lacks snap. Prices easier. Rosins marking time as buyers hold off. Rosin oils steady. Tar and pitch moving slowly.

J. B. McMillin to Form Marketing Company

BRADFORD, PA., April 4.—J. B. McMillin has resigned as sales manager of the Bradford Gasoline Co. and has announced he will organize a petroleum products marketing company of his own.

Sales work of the Bradford company have been taken over jointly by William F. Jones and H. E. Double who have been with the company. Mr. McMillin was with the Bradford company for more than six years and for five years previous to that service was with the old Riverside Eastern-Western Oil Cos. at Pittsburgh.

STEAM BOAT SPRINGS, COLO.—H. D. Martin, of the Continental Oil Co. of this city, says that from present indications, the Victory Highway over the Rockies from Denver to Salt Lake City, will be open and free from snow three weeks earlier this year than it usually is.

OIL STOCKS AND FINANCES

Vacuum Reports Most Profitable Year In Company's History

NEW YORK, April 4

WHEN oil companies were struggling along last year trying to make ends meet, some just doing so, some earning a smaller profit than in recent years, and some piling up deficits, the Vacuum Oil Co. was having the most successful year in its history.

The company after interest and ordinary depreciation and other regular charges netted $20,247,248 and after writing off an inventory loss of $1,843,414 and setting aside a tax reserve of $1,000,000, the company had a balance of $17,403,834 available for dividends, which totaled approximately $9,271,155.

Earnings last year after all the charges were equivalent to $7.02 per $25 share as compared with $5.45 a share in 1923. Cash dividends totaled $3.75 a share or 15 per cent on the par value of the stock. Net profits were approximately 30 per cent greater than those of 1923.

The company plans, according to the annual report, to redeem on April 1, 1926, the outstanding $16,000,000 of 15-year 7 per cent bonds issued April 1, 1921. In accordance with the trust agreement the company has the privilege of calling those bonds on that date at 104.

The balance sheet as of Dec. 31 shows current assets of $91,615,553 and current liabilities of $8,541,690, leaving net working capital of $83,073,863 as against working capital of $76,415,645 at the end of 1923.

The gain in the plant account represents the purchase of another tanker during the year. The company now has nine ocean going tankers.

Balance sheets of the Vacuum Oil Co. as of Dec. 31 for the last five years compare:

	1924	1923	1922	1921	1920
ASSETS					
Real estate, plant etc (net)	$ 21,098,227	$ 20,323,471	$ 19,655,886	$ 19,906,984	$19,182,809
Stocks, in foreign cos.	18,797,070	18,843,077	19,905,327	19,055,810	19,157,298
Other investments	44,408	188,829	49,880	65,580	70,924
U. S. Securities	.....	.....	.....	.....	25,405
Merchandise, materials	30,811,010	26,150,150	24,661,351	24,481,754	33,001,603
Accounts receivable*	13,042,155	7,423,323	7,095,270	2,889,243	23,650,230
Other accounts receivable	8,581,548	†	†	†	†
Cash and securities	39,180,840	54,467,716	52,028,051	36,807,232	4,004,227
Deferred charges	1,615,717	328,708	375,417	457,021	.....
Total	$133,170,977	$127,725,274	$122,771,182	$109,663,624	$99,092,496
LIABILITIES					
Capital stock (Par $25)	$ 61,919,950	$ 61,523,075	$ 60,000,000	**$15,000,000	**$15,000,000
Bonded indebtedness	16,100,000	16,100,000	17,000,000	19,243,000	.....
Due foreign Vacuum Cos.	3,454,513	7,720,551	10,960,962	5,881,894	24,414,818
Other accounts payable	2,960,890	2,778,704	2,495,578	4,440,352	.....
Branch reserve	.....	.....	5,612	7,260	7,279
Insurance reserve	2,500,000	2,500,000	2,446,268	2,178,821	1,798,654
Income tax reserve	2,126,288	1,126,288	1,057,379	307,379	225,393
Surplus	44,109,335	35,976,656	28,805,382	62,604,918	57,646,352
Total	$133,170,977	$127,725,274	$122,771,182	$109,663,624	$99,092,496

*Due from foreign Vacuum Oil Companies. †Included in "Cash and Securities." **$100 par.

Condensed income accounts of Vacuum Oil Co., for last five years follow:

	1924	1923	1922	1921	1920
Net profit after depreciation	$20,247,248	$16,661,713	$15,310,173	$6,838,733	$8,944,392
Inventory depreciation	1,843,414	2,361,055	692,263	.....	.....
Tax reserve	1,000,000	750,000	750,000	300,000	225,393
Insurance reserve	.....	53,781	267,447	380,167	332,216
Loss in Japanese earthquake	.....	182,812	.....	.....	.....
Net income	$17,403,834	$12,314,114	$13,600,463	$ 6,158,566	$8,386,783
Cash dividends	9,271,155	6,142,840	2,400,000	1,200,000	1,200,000
Surplus	$ 8,132,679	$ 7,171,274	$11,200,463	$ 4,958,566	$7,186,783

Cleveland Stock Market

April 3

	Par	Bid	Asked	Last Sale
Canfield Oil Co.	$100	111	.....	125
do pfd	100	96	100	95
Fred G. Clark Co.	10	3	.....	5
National Refin. Co.	25	35	39	37
do pfd	100	.....	.....	.....
Paragon Refin. Co.	25	6⅞	8⅞	7¼
do pfd	100	.....	64	63

x—Ex dividend

Oil Dividends

	Amount	Stock of Record Payable	
Eureka P. L. q.	$1	May 1	Apr. 15
Salt Creek Prod. q.	20c	May 1	Apr. 15
do extra	40c	May 1	Apr. 15
Union Oil of Calif. q.	45c	May 10	Apr. 16
United of Calif. q.	75c	Apr. 15	.....
Ventura Cons. q.	50c	May 1	Apr. 15

Transcontinental Cuts Property Account

CLEVELAND, April 4.—Value at which property was carried on its books has been cut to less than one fourth by the Transcontinental Oil Co. in an appraisement since the first of 1925, a balance sheet issued in connection with the company's flotation of $4,000,000 7 per cent five-year gold notes on April 1, shows.

Giving effect to the financing and taking into account more than 500,000 shares of common stock issued since Jan. 1, the balance sheet as of Jan. 31 shows:

Assets	
Cash and advances	$1,032,416
Accounts receivable	1,132,849
Notes receivable	147,578
Inventories	2,461,732
Reserve fund	9,196
Sinking funds	465,009
Invest. in Lat. Amer. Pet. Corp	148,489
Oil lands, well investment	28,037,770
Plants, equipment	16,657,374
Patents, trade marks	1,000,000
Deferred charges	228,419
Total	$51,320,823
Liabilities	
Accounts payable	$1,233,446
Accrued expenses	333,511
Purchase money obligations	332,732
Tank car obligations	1,589,075
7% notes to be issued	4,000,000
10-year 8% bonds	2,000,000
Deferred contingent liab.*	1,293,167
Preferred stock	15,750,000
Common stock, surplus	24,788,892
Toal	$51,320,823

*Payable only out of one half of working interests in production in Creek county, Okla., and Palo Pinto and Stephens counties, Texas.

The purpose of the note issue, according to the statement of F. B. Parriott, president, was to reduce current indebtedness and provide additional working capital. The proceeds from the note issue was augmented by $2,000,000 from the sale of common stock at $5 a share.

The notes are preceded by $2,000,000 8 per cent bonds all of which are owned by the Standard Oil Co. of California, and followed by $15,750,000 preferred stock all of which was issued in 1924.

Each $1,000 note carries a warrant entitling the holder to purchase 100 shares of Transcontinental common stock at $5.50 a share on or before Oct. 1, 1925; at $6.50 until April 1, 1926; at $8 until April 1, 1927; at $10 until April 1, 1928, and at $12 until April 1, 1929.

The Transcontinental has called for payment at 3 per cent premium on June 1 the entire issue of National Steel Car Lines equipment trust certificates.

The company last year reported an operating profit of $1,889,750 as against

(Continued on page 110)

Transactions In Oil Shares on New York Stock Exchange

1924 High	1924 Low	1925 High	1925 Low	Listed Capital	Par Value	Stocks	Div. Rate	Last Paid	Transactions week ended Apr. 4 Sales	First	High	Low	Last	Ch'ge
48	25	66¼	48	(sh) 200,000	N.P.	American Republics	.....	.....	.....	.....	.....	.....	.....	.....
34⅝	27½	39½	32	$ 56,000,000	$25	Associated Oil	37½cQ	Jan. 26, 25	10,700	32¾	34¼	†32	34⅛	+1⅜
140⅛	78½	117½	95½	50,000,000	100	Atlantic Refining	.....	June 16, 24	5,200	100	107	99	103	+3
118	108	115¼	113½	20,000,000	100	do pfd	$1¾Q	Feb. 2, 25	100	115	115	115	115	— ⅜
23½	14	30	21	13,000,000	25	Barnsdall Corp. A	.....	Apr. 30, 21	15,400	22⅜	23½	21½	23½	+2
17½	10	23	17	3,713,270	25	do B	.....	Apr. 30, 21	600	18	18	17¼	17⅝	— ⅝
4¼	1	2¾	⅞ (sh)	150,000	N.P.	Caddo Central O. & R	.....	.....	900	1⅜	1⅜	† ⅞	1	0
89¼	19½	32⅞	23⅞ $	17,377,000	$25	California Petroleum	43¾cQ	Mar. 2, 25	88,300	27⅞	30	27⅜	29¾	+1¾
107	92½	114	100	11,955,100	100	do pfd	$1¾Q	Apr. 1, 25	3,300	110½	*114	108¾	114	+2½
40¼	22⅝	35⅜	26 (sh)	1,357,800	N.P.	Cosden & Co	.....	Aug. 1, 23	.....	.....	.....	.....	.....	.....
95	80	90¾	83 $	6,998,000	$100	do pfd	$1¾Q	Mar. 2, 25	.....	.....	.....	.....	.....	.....
63⅜	31⅜	63¾	42⅜	19,832,000	100	General Asphalt Co	.....	.....	12,000	46	46¾	†42½	46	— ½
100	71½	100	86⅜	7,416,000	100	do pfd	$1¾Q	Mar. 2, 25	400	87½	87½	87⅜	87½	—4⅜
45	38⅜	57⅜	42	28,866,650	25	General Petroleum	50cQ	Mar. 16, 25	67,300	48⅝	51	46¾	50⅜	+2¼
82½	61	85	60⅝	25,000,000	100	Houston Oil Co	.....	.....	6,600	63	64½	†60⅝	63¼	+ ¼
16¼	5¾	33½	13½ (sh)	450,000	N.P.	Independent Oil & Gas	25cQ	Mar. 31, 25	45,800	23½	24⅝	22½	24¼	+1
7⅜	3¾	10⅜	5½ $	7,830,450	10	Indian Refining Co	.....	Dec. 15, 20	1,900	6½	7½	6½	7½	+ ½
75	60	95	77	2,296,400	100	do pfd	.....	Dec. 15, 21	.....	.....	.....	.....	.....	.....
1	¼	1¼	½	1,682,280	$10	Kansas & Gulf Corp	.....	.....	500	½	½	½	½	0
.....	.....	23¾	14⅝ (sh)	996,302	N.P.	Louisiana Oil Refining	.....	.....	16,500	15⅝	16½	†14⅜	16¼	+ ¾
37½	24⅝	35½	25¼ (sh)	330,000	N.P.	Maracaibo Oil	.....	.....	6,200	26⅜	26½	†25¼	25⅜	— ¾
42	29	46¾	32⅝ (sh)	1,649,566	N.P.	Marland Oil Co	.....	July 1, 23	75,200	34¼	36⅞	†32⅝	36⅞	+2⅞
190	190	250	225 $	45,942,800	$100	Mexican Petroleum Co	$3Q	Jan. 20, 25	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	12,000,000	$100	do pfd	$2Q	Jan. 20, 25	.....	.....	.....	.....	.....	.....
25¾	14⅜	22¾	11⅝ (sh)	945,989	N.P.	Mexican Seaboard Oil	.....	Nov. 15, 24	10,700	12½	14½	11¾	14¼	+1⅞
6⅞	1	1⅜	1 $	29,800,220	$10	Middle States Oil Corp	.....	July 1, 23	9,400	1⅜	1⅜	1	1	— ⅛
58¼	45	65¼	52¼ (sh)	3,500,000	N.P.	Pacific Oil Co	$1S.A.	Jan. 20, 25	72,100	54¼	56⅞	†52¾	56	+1¾
65	44¼	83⅞	64 $	48,292,450	$50	Pan American P. & T	$1Q	Jan. 20, 25	33,600	x77	x78⅜	x74	x75⅝	+ ¼
64⅜	41¼	84½	63⅜	89,269,400	50	do Class B	$1Q	Jan. 20, 25	253,600	x77⅝	x79¼	x74⅜	x75¾	0
4⅜	1⅜	5⅜	3 (sh)	198,770	N.P.	Panhandle P. & R	.....	.....	.....	.....	.....	.....	.....	.....
42½	29	60½	43 $	3,855,770	$100	do pfd	.....	July 2, 23	.....	.....	.....	.....	.....	.....
42½	28½	46⅜	36¼ (sh)	1,849,904	N.P.	Phillips Petroleum	50cQ	Apr. 1, 25	57,900	37⅞	38⅞	†36¼	38¾	+1⅝
4½	1⅝	3⅝	1¾ $	29,622,925	$25	Pierce Oil Corp	.....	.....	2,000	2	2⅜	2	2⅜	+ ⅜
36	20	40	25⅜	15,000,000	100	do pfd	.....	Feb. 1, 22	700	30	34	30	34	+2
5¾	4⅜	8¼	5¾ (sh)	2,500,000	N.P.	Pierce Petroleum	.....	.....	10,300	6⅜	6¾	6	6½	+ ⅜
45½	22¾	32⅝	22 $	11,467,850	50	Producers & Refiners	.....	Sept. 15, 23	5,300	23	23½	†22	23¼	+ ¼
47½	42	47⅝	43½	2,845,350	50	do pfd	87½cQ	Feb. 2, 25	100	45	45	45	45	0
30¼	20	33¾	25½	71,499,850	25	Pure Oil Co	37½cQ	Mar. 2, 25	15,200	26⅜	27	†25½	26⅞	+ ⅜
105¼	92	106¾	103	13,000,000	100	do 8% pfd	$2Q	Apr. 1, 25	400	103	104½	103	104½	+1½
59½	40⅜	57⅜	48¼ (sh)	817,193	13.40	Royal Dutch, N. Y. shares	$3.18⅓	Aug. 12, 24	11,200	49¼	50⅞	48⅜	50¼	+1¾
42	33	45¾	40⅜ (sh)	113,608	£2	Shell Transport & T	95c	Jan. 24, 25	500	40⅛	41⅞	†40⅜	40⅜	— ⅜
22½	15¾	28⅜	22½ (sh)	10,000,000	N.P.	Shell Union Oil Corp	25cQ	Mar. 31, 25	31,800	23⅝	24¼	23	24¼	+ ⅜
99½	91½	101½	99½ $	20,000,000	$100	do pfd	$1½Q	Feb. 15, 25	300	100¾	101	100¾	101	+ ⅜
24	10⅜	26¾	19¾	7,205,740	10	Simms Petroleum Co	50Q	Jan. 2, 25	31,300	21	22½	19¾	22¼	+1⅝
27⅛	15	24⅞	17 (sh)	4,482,225	N.P.	Sinclair Consolidated	.....	May 31, 24	33,000	18⅜	20¼	18	19⅞	+1½
90	75	94⅝	78¾ $	18,541,100	$100	do pfd	$2Q	Feb. 16, 25	600	84½	86¾	84½	86¾	+2⅜
29	17⅛	30½	21¾	20,856,590	25	Skelly Oil Co	.....	.....	17,500	22⅜	24¼	†21¾	24¼	+1¾
68½	55⅜	67¾	56⅜	235,324,250	25	S. O. California	50cQ	Mar. 16, 25	22,100	57¾	60½	†56⅜	59⅜	+1⅜
42¼	33	47½	38⅜	507,856,025	25	S. O. New Jersey	25cQ	Mar. 16, 25	58,600	39⅜	42	†38⅜	42	+2½
119⅛	115¾	119	116¾	199,972,900	100	do pfd	$1¾Q	Mar. 16, 25	1,000	117⅝	117¾	117⅝	117¾	+ ¾
8⅛	2⅜	6⅜	4 (sh)	1,116,268	N.P.	Superior Oil Corp	.....	Dec. 20, 20	5,900	4¼	4⅞	4⅛	4⅞	+ ½
45⅜	37¾	49	42¾ $	164,450,000	$25	The Texas Co	75cQ	Mar. 31, 25	18,500	43⅜	44½	43½	44⅜	+ ⅜
15¼	8	23¾	11½	8,380,340	10	Texas Pacific Coal & Oil	.....	June 30, 23	34,600	13	14¼	12	14	+1
151	116¼	152	122	50,442,900	100	Tide Water Oil Co	$1Q	Mar. 31, 25	4,000	126	131	†122	129	+3
6¼	3¾	5½	3⅞ (sh)	3,232,529	N.P.	Transcontinental Oil Co	.....	.....	21,800	4⅛	4⅜	3⅞	4	— ⅛
39	35	43⅜	36¼ $	40,480,800	$25	Union Oil of California	45cQ	Feb. 10, 25	13,600	36¾	38⅛	†36¼	37⅝	+ ⅜
132⅞	94	128¾	118½	18,115,000	$100	Union Tank Car Co	$1¼W	Mar. 2, 25	1,200	123	127	122	127	+2
116¾	106¼	116¾	113¾	12,000,000	100	do pfd	$1¾Q	Mar. 2, 25	.....	.....	.....	.....	.....	.....
29⅜	23⅛	31¾	25⅝ (sh)	460,000	N.P.	White Eagle Oil & Ref	50cQ	Jan. 20, 25	3,500	26⅛	26⅛	†25⅝	26⅛	0

*New High †New Low xEx-Dividend Total Sales 1,139,200

Standard Oil Stock Traded In New York Curb Market

1924 High	1924 Low	1925 High	1925 Low	Outstanding Capital	Par Value	Stocks	Div. Rate	Last Paid	Transactions week ended Apr. 3 Sales	First	High	Low	Last	Ch'ge
18¾	14⅜	22¾	18	£ 3,000,000	£1	Anglo American	45cS.A.	Nov. 15, 24	20,400	20⅝	*22¾	20¾	22¼	+1⅜
4⅞	2	4	2½ (sh)	500,000	N.P.	Atlantic Lobos	.....	.....	600	2¾	3	† 2½	2½	— ¼
16	5	10¾	6⅞ $	10,000,000	$10	do pfd	.....	.....	.....	.....	.....	.....	.....	.....
265	155	289	212	1,000,000	$100	Borne-Scrymser	$48S.A.	Oct. 15, 24	40	212	212	†212	212	.....
85½	51	72	61⅝	10,000,000	50	Buckeye Pipe Line	$1Q	Mar. 14, 25	180	62½	63	†61½	62	0
52½	47⅜	70	48½	3,000,000	25	Chesebrough Mfg. Co	62½cQ	Mar. 31, 25	300	54	54	53¾	54	—3
115	112	114	110	1,000,000	100	do pfd	$1¾Q	Mar. 31, 25	150	112½	113¾	112½	113½	+3½
54⅞	39¾	.....	.....	10,000,000	25	Continental Oil	50cQ	Dec. 15, 24	.....	.....	.....	.....	.....	.....
.....	.....	31⅜	21⅜	.....	$10	Continental New V. T. C	25cQ	Mar. 16, 25	54,300	23¾	24¼	†21⅜	24	+ ¼
20	11¼	15⅜	12½	1,500,000	25	Crescent Pipe Line	.....	Sept. 15, 23	.....	.....	.....	.....	.....	.....
149	110¾	150	132	3,000,000	100	Cumberland Pipe Line	$3Q	Mar. 16, 25	50	133½	134	133½	134	+ ½
105	74	96	80	5,000,000	100	Eureka Pipe Line	$1Q	Feb. 2, 25	130	80	80¾	†80	80	0
69¾	52	65	56¾	16,000,000	100	Galena Signal Oil	$1Q	Mar. 31, 25	100	57½	57½	57½	57½	—2½
113	100½	105	100	4,000,000	100	do new pfd	$2Q	Mar. 31, 25	80	101	101	†100	101	.....
116	110	.....	.....	2,000,000	100	do old pfd	$2Q	Mar. 31, 25	.....	.....	.....	.....	.....	.....
43¾	34½	47¾	42½	43,750,000	25	Humble Oil & Ref	30cQ	Apr. 1, 25	8,500	43⅜	45¼	42¾	44½	+1⅜
161	120	154½	127	20,000,000	100	Illinois Pipe Line	$6S.A.	Dec. 30, 24	160	142	142	140	140	—1
119	98½	134¾	119½	39,222,750	25	Imperial Oil Coupons	75cQ	Dec. 1, 24	.....	.....	.....	.....	.....	.....
.....	.....	34⅜	27¼	.....	$25	Imperial New w.i	25c	Mar. 1, 25	10,400	28¼	30¼	27¼	29¾	+1¾
100	66	84	70	5,000,000	50	Indiana Pipe Line	$1Q	Feb. 14, 25	80	72	72	†70	72	0
24¾	16¾	28¾	22¼ (sh)	7,118,138	N.P.	International Petroleum	25c	Nov. 29, 24	36,700	23⅝	24¼	†22¼	23⅞	+ ⅜
162	122	159	131½ $	188,000,000	100	Magnolia Petroleum	$1Q	Jan. 5, 25	110	133	135	†131½	135	+3
25⅞	20⅝	25½	22	6,362,500	12½	National Transit	50cQ	Mar. 16, 25	800	22½	22½	†22	22	— ¾
97	54½	79	64¼	5,000,000	100	New York Transit	50cQ	Jan. 15, 25	10	65¼	65¾	65¼	65¾	— ¾
107½	72	88	81½	4,000,000	100	Northern Pipe Line	$3S.A.	Jan. 1, 25	150	83¾	84	83	84	0
179½	55	75	62¼	60,000,000	25	Ohio Oil Co	50cQ	Dec. 31, 25	2,300	63	66	63	65¾	+1¾
48	27	44½	35¾	10,000,000	25	Penn.-Mex. Fuel	.....	.....	1,200	38⅝	39	38	38	— ½
269	193	250½	209	60,000,000	100	Prairie Oil & Gas	$2Q	Jan. 31, 25	.....	.....	.....	.....	.....	.....
54¾	49½	65½	50¼	.....	$25	Prairie O. & G. New w.i	.....	.....	12,600	51¾	54½	†50¼	54⅛	+2⅛
111	100	126	106	81,000,000	100	Prairie Pipe Line	$2Q	Jan. 31, 25	790	118	118½	115½	116½	—2
230	175	259	200	4,000,000	100	Solar Refining Co	$5S.A.	Dec. 20, 24	100	228	228½	220	220	+1
100	80½	103	83⅛	10,000,000	100	Southern Pipe Line Co	$1Q	Mar. 1, 25	110	85	85	†83⅛	84	—1
171	117	197	139	20,000,000	100	South Penn Oil Co	.....	Sept. 30, 22	1,210	167	168	164	165½	—2½
89	68	84	65	3,500,000	100	Southwest Pa. Pipe Lines	$1Q	Apr. 1, 25	.....	.....	.....	.....	.....	.....
68⅜	54¾	70	59⅜	223,756,258	25	S. O. Indiana	62½cQ	Mar. 16, 25	76,200	60⅞	63⅞	59⅜	63¾	+3
50¼	32½	46	31¾	8,000,000	25	S. O. Kansas	.....	June 16, 24	6,300	34	34	†31¾	32	—2⅛
121¼	101	124¾	114¾	16,784,047	25	S. O. Kentucky	$1Q	Mar. 31, 25	2,500	115¾	116½	115	116½	+ ½
262	198	270	244	3,000,000	100	S. O. Nebraska	$8S.A.	Dec. 20, 24	110	252	252	248	248	—8
48	37¾	48⅝	41⅛	225,324,650	25	S. O. New York	35cQ	Mar. 16, 25	9,000	42⅛	43¼	41½	42¾	+ ¾
377½	275	369	338	14,000,000	100	S. O. Ohio	$2½Q	Apr. 1, 25	310	346	347	344	347	—2
136	115	128	117½	7,000,000	100	do pfd	$1¾Q	Mar. 2, 25	140	118	121	118	118	—3
81	20	27	16	1,722,931	25	Swan & Finch	.....	Nov. 1, 19	200	20	20	†16	18	—2
83½	56¼	96¾	80⅜	61,523,075	25	Vacuum Oil Co	50cQ	Mar. 20, 25	18,100	86¾	88	83½	87	0
30	25	30½	30	100,000	10	Washington Oil Co	.....	Jan. 31, 22	.....	.....	.....	.....	.....	.....

(Continued from page 108)

$250,754 in 1923. After interest, cost of drilling dusters, etc., but before depreciation and depletion, it had a loss of $621,764 as against a loss of $2,363,221 in 1923, $476,973 in 1922, and $2,902,374 in 1921.

Consolidated income accounts for the last two years follow:

	1924	1923
Gross earnings	$14,100,723	$14,218,656
Expenses, etc.	12,210,973	13,967,902
Oper. profit	$1,889,750	$250,754
Interest, etc	1,780,347	1,397,404
Dry holes, etc.	731,167	1,216,571
Net loss	$621,764	$2,363,221

Balance sheets of the Transcontinental Oil Co. as of Dec. 31, 1924 and 1923, compare:

Assets

	1924	1923
Property	$214,172,422	$209,958,043
Organ. expenses.	2,566,872	267,788
Reserve funds	9,148	10,341
Investments	1,711,400	1,560,373
Pat. & trade mk.	2,450	2,179
Treas. stock	20,000	20,000
Inventories	2,167,150	2,249,128
Acc'ts, notes rec.	1,221,227	941,816
Cash	378,931	222,541
Sink. funds, etc.	465,000	.....
Deferred charges	180,986	351,102
P. & L. def.	6,254,400	5,632,636
Total	$229,149,986	$221,215,947

Liabilities

Preferred stock	$15,750,000	.....
*Common stock	1	$1
Real est. pur. agr.	358,768	460,438
Bonds	2,000,000	8,657,000
Adv. by off.	2,014,078	7,004,416
Tank car obliga.	1,595,800	780,907
Conting. liab.	1,313,919	1,628,009
Trade acc. and notes pay.	2,945,142	4,085,294
Accts. pay.	1,377,281	1,467,348
Accrued exp.	309,431	205,709
Reserves	131,085	113,152
Surplus	201,354,481	196,813,673
Total	$229,149,986	$221,215,947

*Consists of 3,132,529 shares without nominal or par value.

Financial Notes

Vacuum Oil Co.—All directors and officers re-elected.

Phillips Petroleum Co.—New York Stock Exchange notified of proposed increase in authorized capital stock from 2,000,000 to 2,500,000 shares.

Caddo Central Oil & Refining Corp.—Annual meeting adjourned until April 20 on account of lack of quorum.

Louisiana O. R. Reports Loss

NEW YORK, April 3.—Report of Louisiana Oil Refining Corp. for the six months ended Dec. 31 shows a net loss of $193,173 after interest, depreciation, depletion and drilling expenses. Consolidated income account for the five months follows:

Earnings from operations	$355,911
Other income	24,166
Total income	$380,077
Interest	96,646
Drilling expenses, etc.	82,749
Depletion	52,915
Depreciation	340,940
Net loss	$193,173

New York Curb Bonds

Week Ended April 6

	High	Low	Last	Ch'ge
Cities Serv. 7s C	117½	116½	117½	+ ½
do 7s D	102	100¾	101¾	+ ¾
do 8s E	111¾	111¾	111¾	—1¼
Galena S. O. 7s	105	104¾	104¾	0
Gen. Pet. 6s	101½	101¼	101½	+ ⅜
Gulf Oil 5s	99	98¾	99	+ ¼
do 5½s '28	101½	101½	101½	0
Pennok Oil 6s	100⅝	100	100	— ¼
Pure Oil 6½s	100⅜	99⅞	100⅜	+ ⅜
S. O. N. Y. 6½s	107½	107¼	107½	+ ⅛
Sun Oil 5½s	96¼	95⅝	96	.....
Tidal Osage 7s	104	104	104	.....
do 5s	96	96	96	0
United Oil Prod. 8s	33½	32½	33	—1
Vacuum Oil 7s	106¼	106⅛	106⅛	0

New York Bonds

Week Ended April 6

	High	Low	Last	Ch'ge
Associated Oil 6s	102½	102¼	102¼	— ½
Atlantic Refg. debs 5	99	98½	99	— ⅜
Barnsdall Corp. 8s	105	104½	104¾	+ ⅛
Calif. Petrol sf 6½s	103⅞	103	103	— ½
Empire Gas & Fuel 7½s	101¾	100½	101¾	+ ¼
General Asphalt 6s	102¾	102¾	102¾	0
Humble O. & R. 5½s	101⅝	100⅝	101	+ ⅜
Marland 8s ser A	106	106	106	+ ¾
Mid-Cont. Pet. 6½s	96⅜	95¼	96⅛	+ ⅛
Pan Amer. Pet. & Trans. 6s	113¾	109	110¾	— ½
do 7s	106	105¼	105½	— ½
Pierce Oil debs 8s	103⅝	103½	103½	— ⅛
Prod. & Ref. 8s	110¼	110¼	110¼	+ ¼
Sinclair Con. col. 7s	92⅞	91⅝	92⅝	+1⅛
do 6s	180½	106	103½	+1⅛
do 6½s	89¼	87¼	88½	+ ½
Sinclair Crude 6s	100¾	99⅞	100¼	+ ¼
Sinclair P. L. sf 5s	84¾	84½	84½	— ¼
Skelly Oil 6½s	109⅞	107¾	109¾	+1½
Tide Water Oil 6½s	103¾	103¼	103½	— ¼
Union Oil of Calif. 6s	104½	104½	104½	0
do 5s	100⅝	100⅝	100⅝	+4⅜

New York Curb Market

1924 High	1924 Low	1925 High	1925 Low	Par Value	Stocks	Transactions week ended Apr. 3 Sales	First	High	Low	Last	Ch'ge
.....	.....	4	2⅝	.....	Amer. Maracaibo	700	2½	3	2½	2½	— ½
7	4	8¾	5½	10	Ark.Nat.Gas	1,000	5¾	5¾	5½	5½	— ⅜
6⅝	2¾	4½	2¾	25c	Carib.Synd	2,200	3½	3½	3⅜	3⅜	— ⅛
190	132	212	175	100	Cities Service	1,580	175	181	175	181	+9½
.....	.....	37	35	.....	do new	2,300	35	36	35	35¾	+ ¾
82⅛	67¾	82⅛	80¼	100	do pfd	1,000	81½	82	81⅜	82	+ ¾
7¾	6⅛	7⅜	7¼	10	do pfd. B	2,000	7⅜	† 7¾	7⅜	7⅜	0
19	13¾	21⅜	17⅜	10	do Bkrs. Sh	1,500	17½	17¾	17½	17¾	+ ¼
10⅝	2¾	11⅞	8¼	N.P.	Creole Synd	14,700	11¼	12⅜	10⅞	12⅛	+ ¾
8	1½	7	4½	N.P.	Derby Oil & Ref	200	5¾	5¾	5½	5½	— ½
54¼	17½	27	25	N.P.	do pfd	.....	.....	.....	.....	.....	.....
.60	.12	.25	.18	5	Federal Oil	1,000	.18	.18	.18	.18	0
.60	.15	.27	.20	10	Glenrock	1,000	.20	.20	.20	.20	0
67¾	56	71	63½	25	Gulf Oil Corp	4,600	65	65½	64	65¼	+ ¼
7	1⅛	5⅞	2¾	N.P.	Kirby Petroleum	2,400	3¼	3½	3⅛	3½	— ⅛
6¾	2¾	7½	5	N.P.	Lago Petroleum	155,000	6½	* 7¼	6⅛	6⅞	+ ⅜
4⅞	1½	4½	1¾	N.P.	Marland of Mexico	.....	.....	.....	.....	.....	.....
20¾	16	21⅞	18¾	10	Mountain Prod	11,800	20¼	21¼	19⅝	21	+ ¾
14	9½	14⅝	11⅞	5	Mutual Oil ctfs	.....	.....	.....	.....	.....	.....
6¼	3½	5¾	3¼	5	New Bradford Oil	3,200	5½	5½	5¼	5½	+ ¼
44	17	24¾	16¼	10	New England Fuel	400	20	20	17	17	—3
14	8⅛	10	8¼	25	New York Oil	600	9¾	9¾	9¼	9¼	+ ¼
33⅛	29⅜	33¾	31⅝	25	Ohio Fuel Corp	.....	.....	.....	.....	.....	.....
6	.70	1¾	1	N.P.	Peer Oil Corp	4,900	1⅛	1⅜	1	1⅛	— ⅛
18¼	12⅛	25	16	10	Pennok Oil	1,800	20½	21½	20¼	21½	+ ½
57¾	5¾	32½	18⅜	25	Red Bank Oil	500	20	21	20	21	+ ½
5½	3	9¾	3½	N.P.	Ryan Consolidated	10,900	7	7½	6¼	7	+ ¼
10¾	6	8¾	6½	10	Salt Creek Cons	1,100	7½	7¾	7⅜	7⅜	— ⅛
27½	19⅛	27½	24	10	Salt Creek Prod	10,200	26½	27⅜	25½	27	+ ⅜
2½	.80	2	1	5	Sapulpa Refining	.....	.....	.....	.....	.....	.....
16¼	6¼	18¾	9¾	10	Tidal Osage	300	9½	9½	9½	9½	— ½
4½	2⅝	4¾	3⅜	.....	Venezuelan Pet	1,800	3⅜	4½	3⅞	4½	+ ⅛
8½	4⅝	7¾	5¾	5	Wilcox Oil & Gas	9,600	6	6⅝	6	6	— ⅛
13⅞	4¾	7	8¾	N.P.	Woodley Petroleum	1,500	4	5	4	5	+1⅛

Pittsburgh Stock Exchange

1924 High	1924 Low	1925 High	1925 Low	Par Value	Stocks	Transactions Week Ended Apr. 3 Sales	First	High	Low	Last	Ch'ge
7	4	8¼	5¾	$10	Arkansas Nat. Gas	4,770	6	6	5½	5½	— ¼
40½	35¾	.....	.....	N.P.	Columbia Gas	.....	.....	.....	.....	.....	.....
.....	.....	107	105¾	$100	Duquesne Lt.7s pfd.	10	107	107	107	107	+ ¼
30	30	.....	.....	25	Fayette County Gas	.....	.....	.....	.....	.....	.....
38½	26½	40	32¾	25	Lone Star Gas	1,145	39	39	38½	38½	—1
35¾	28½	34¼	32	25	Ohio Fuel Corp	3,998	32⅝	32⅝	x31⅜	31¾	— ¾
16½	11¾	16¾	13¾	1	Ohio Fuel Oil	920	14	14	12	13¼	—1½
28½	22¾	31½	26	25	Oklahoma Nat. Gas	845	28¼	28¼	28	28	— ½
9¾	6	8¾	7¾	5	Pittsburgh O. & G	15	7¾	7¾	7¾	7¾	0
10½	6	8¾	6¾	10	Salt Creek Cons	140	7¾	7½	7¾	7½	— ¼
16½	8	13¾	8¾	10	Tidal Osage	20	9⅞	9⅞	9⅞	9⅞	— ⅛
92	92	.....	.....	100	do pfd	.....	.....	.....	.....	.....	.....

Pittsburgh Curb Market

1924 High	1924 Low	1925 High	1925 Low	Par Value	Stocks	Transactions Week Ended Apr. 3 Sales	First	High	Low	Last	Ch'ge
2½	2¼	.....	.....	N.P.	Arkansas Fuel	.....	.....	.....	.....	.....	.....
1	.20	1½	.60	$5	Colombia Synd	100	1½	1½	1½	1½	0
.70	.25	.60	.15	5	Duquesne Oil	.....	.....	.....	.....	.....	.....
9½	5⅜	9	7	10	Forest Oil	.....	.....	.....	.....	.....	.....
66¾	57	70	64	25	Gulf Oil Corp	.....	.....	.....	.....	.....	.....
23¾	21	.....	.....	N.P.	International Pet	.....	.....	.....	.....	.....	.....
4½	4½	.....	.....	N.P.	Lago Petroleum	.....	.....	.....	.....	.....	.....
6	5	.....	.....	$10	Marshall Oil	.....	.....	.....	.....	.....	.....
2⅛	1½	2¾	1¾	1	Oklahoma Eastern	9,114	1⅝	1½	1¾	1½	0
.....	.....	¾	¾	.....	do rights	1,676	¾	¾	¾	¾	0
.77	.35	.40	.40	10	Omar O. & G	.....	.....	.....	.....	.....	.....
8	3⅝	7	3	5	States Oil	.....	.....	.....	.....	.....	.....
14	10	11	9	10	TidalOsagenon-vot'g	.....	.....	.....	.....	.....	.....

*New High †New Low x Ex Dividend

Union Tank Car Co.'s Net is Lower

NEW YORK, April 6.—Union Tank Car Co. in 1924 netted $3,229,870 after federal taxes and all reserves, equal after dividends on the preferred stock, to $13.19 a share on the $100 common stock. In 1923 the company earned $18.14 a share on the common stock.

During 1924 the company increased its cash position by more than $1,500,000 and all current assets by about $1,200,000. Current liabilities, consisting only of current accounts, were decreased by more than 50 per cent.

Income accounts for 1924 and 1923 compare:

	1924	1923
Net oper. earns	$7,223,926	$8,374,135
Depreciation	3,401,368	3,616,756
Reserves	592,688	560,000
Net income	$3,299,870	$4,197,379
Dividends	1,741,125	1,740,000
Surplus	$1,488,745	$2,457,379

Balance sheets as of Dec. 31, 1924 and 1923, follow:

Assets

	1924	1923
Equip., less depre.	$43,254,649	$46,470,226
Shops and material	1,336,000	1,092,999
Office furniture	21,789	16,070
Cash and securities	3,486,393	1,928,429
Accounts receiv.	1,328,409	1,658,697
Total	$49,427,241	$51,066,421

Liabilities

Preferred stock	$12,000,000	$12,000,000
Common stock	18,115,000	18,000,000
Car trust notes	4,000,000	6,500,000
Acc'ts payable	613,638	1,343,122
Reserves	906,566	920,007
Surplus	13,792,037	12,303,292
Total	$49,427,241	$51,066,421

Washington Oil Co. Reports Profit

CLEVELAND, April 8.—The Washington Oil Co. reports for 1924 a net profit of $15,762. This is the first time this smallest member of the Standard Oil group has not suffered a deficit on its operations. This is equivalent to $1.57 a share on the 10,000 shares of $10 stock. The company is a producer of Pennsylvania crude.

In 1923 the deficit was $5,582; in 1922 $32,261, and in 1921 $30,073. Its best year was 1920 when it earned $64,076 or 64 per cent on the capital. Income statements for the last two years compare:

	1924	1923
Gross income	$128,629	$112,831
Exp. taxes, depl. etc.	112,867	118,413
Net profit	$15,762	*$5,582

*Loss.

Balance sheets as of Dec. 31, 1924, and 1923, compare:

Assets

	1924	1923
Property	$71,443	$77,878
Investments	28,000	28,000
Material, merchandise	75,875	58,181
Cash	3,286	1,610
Acc'ts receivable	1,676	2,849
Total	$180,280	$168,518

Liabilities

Stock	$100,000	$100,000
Acc'ts payable	18,821	22,821
Surplus	61,459	45,697
Total	$180,280	$168,518

The Oil Industry Exchange

Positions Wanted

Experienced Oil Salesman desires position with oil company selling to Independent jobbers or garage trade. Kansas and Nebraska territory preferred. Box 341.

Efficient Refiner with excellent record in office management, skimming, lube and cracking operations, desires position as superintendent with growing company. Box 346.

Man experienced in building bulk stations, service stations, desires position with refinery or marketing concern. Will go anywhere. Excellent references. Box 347.

Young Man with Selling Experience in oil industry, both jobbing and retail, following one year general work around refinery. 27 years old. Married. Preparatory school graduate. Employed at present. Box 343.

Experienced Crank Case and Waste Oil Refiner. Can build and operate plant. Knows business from A to Z. Best references. Box 330.

Position wanted as Sales Manager for oil company in East. Graduate engineer. Long experience selling, later lubricating engineer and sales manager for oils and greases. Wide acquaintance and very successful building sales when in charge of men. Now employed. Box 344.

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Salesman

OIL, GREASE, PAINT, ROOF CEMENT. Quality line at prices that eliminate competition. Permanent connection with exceptional possibilities. Old established, square dealing, aggressive organization. Auto furnished after qualifying. If $3500 yearly to start interests you, give age, experience and references. P.O.Box 1735, Pittsburgh, Pa.

Business Opportunities

The Downs' Service

is the
Connecting Link
between the
Refiner and the Jobber

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Special Buying Representative
Castle Building Tulsa, Okla.

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Tank Cars For Lease

1-45 8000 gal. capacity, 6 or 12 months. For clean service. Also some insulated cars.

Box 321

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For Lease or Sale

Four—55,000 gallon steel tank—pipe line connection to R.R. siding. Pumps and tank truck. Location South Brooklyn.

Wm. H. Ray Co.,
Bush Terminal No. 83,
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For Sale

Two Henry Vogt Machine Co.'s 20-ton Exhaust Steam Absorption Refrigerating Systems, for sale, complete. In first-class condition. Box 272.

Oil Companies and Owners of Oil Properties Desiring Additional Capital to finance and enlarge your operations, development and production, HERE IS A SPLENDID OPPORTUNITY to secure control of a long established, good going, producing oil company with extensive holdings of proven oil lands, and operating over sixty producing oil wells, with no fixed, and less than $30,000 current indebtedness; standing well with high credit, and "Blue Sky Law" permits to sell two million dollars additional unsold securities, in the best of all securities-buying states, with sold and steadily paying stock-subscriptions of over $400,000 on our books. The present owner of control of this Company, is not an oil man and must now retire from business altogether, but wants the stockholders well protected, and will almost donate the control for that purpose. If you have good oil properties and production for consolidation, you can get the full control of this Company and its financing, with its great possibilities, for very limited consideration and ample time to pay. Never before was such an opportunity offered to build and finance a strong oil company. Only responsible parties will be considered. Give full particulars of who you are, and what you have, in first letter or come personally ready for business to Manager, Oil Company, 160 West Davison, Detroit, Mich.

Complete Refining and Jobbing Business For Sale

located in southern Kentucky. Includes 40 miles pipe line, 3-100 bbl. stills, filling station, tank wagons, 20 dealers pumps installed.

Capacity of plant sold locally. Plant so arranged that capacity can be increased to 750 bbls. at small cost. Plenty of crude at Somerset prices.

Terms can be arranged for responsible parties. For further information address

Box 345

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